
ARTS SUBJECT DESCRIPTIONS

ABST100 Introduction to Aboriginal Cultures 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Assessment: Literature Review 20%, Tutorial Presentation & Write Up 30%, Essay 40% Participation 10%

Subject Description: This subject provides an introduction to the relationships between Aboriginal Peoples, land and cultures from pre-European to present times. Topics will vary from time to time, but could include identities, kinship, gender, childhood, Elders, authority, decision-making, conflict management, language, communication and local organisations. The subject includes issues relating to the local region.

ABST150 Introduction to Aboriginal Australia 6cp

Autumn/ Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega/ Moss Vale Flexible

Contact Hours: On Campus: 3 hours per week.

Assessment: 1. Minor Essay (15%) 2. tutorial Presentation (20%) 3. tutorial Paper (25%) 4. Reflective Journal (30%) 5. Attendance/Participation (10%)

Subject Description: This subject provides (international and local) students with a general introduction to cultures, histories, and select current issues within Aboriginal Australia, through the key concepts of colonisation and sites of struggle. Topics will vary, but may include the Dreaming, identity, kinship, music, art, literature, language, government policies, land rights, sovereignty, and appropriation of Aboriginality.

ABST200 Aboriginal History Since Invasion 8cp

Autumn Wollongong On Campus

Autumn Shoalhaven Flexible

Autumn Batemans Bay Flexible

Autumn Bega/Moss Vale Flexible

Contact Hours: 3 hours per week

Pre-requisites: At least 12 credit points at 100-level, including (ABST100) or (ABST150) or (VIS123) or (NURS144) or (equivalent approved by Head of Program)

Assessment: Major essay of 2000 words - 40%; Tutorial presentation - 30%; Reflective Journal - 20%; Attendance and participation - 10%

Subject Description: This subject introduces students to contemporary issues in Aboriginal Australia. The basis of the subject is the investigation into what historical knowledge is, how it is constructed, the major forces which take part in that construction, and the implications of historical knowledge contestation. The subject will examine the effects of historical and cultural factors which impact on Indigenous communities and families today. Students will engage with an Indigenous worldview and critically explore notions such as, for example, self-determination, Aboriginal political movements, Native Title, cultural tourism.

ABST300 Indigenous Theories of Decolonisation 8cp

Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega/ Moss Vale Flexible

Contact Hours: 3 hours per week

Pre-requisites: (ABST100 and ABST200 plus 8 credit points at 200 level) or (ABST150 and ABST200 plus 8 credit points at 200 level)

Assessment: 1. Bibliographic/Internet Assignment (10%) 2. Oral Presentation (10%) 3. seminar Paper (20%) 4. Essay Plan (20%) 5. Major Assignment (40%)

Subject Description: This subject aims to enhance students' understandings of colonisation and decolonisation theories. It examines a range of theories and explores their relevance to the Australian situation. Key themes within this subject are power and empowerment at global, national, community and individual levels.

ABST361 Issues in Aboriginal Education 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours per week.

Pre-requisites: (ABST100) or (ABST150) plus 16 credit points at 200 level

Exclusions: Not to count with EDUF211, EDUE301 or EDUE401

Assessment: 1. seminar Assignment (50%) 2. Project or Essay (40%) 3. Attendance/Participation (10%)

Subject Description: Provides students with historical and sociological understandings of the significant role formal education has played/plays as a site of cultural and political struggle for Aboriginal people. Through various topics (eg history of Aboriginal education, current policies, Aboriginal views on education) students will explore select key concepts (assimilation, institutional racism, colonisation, resistance, self-determination, decolonisation) with special attention to the preferred Aboriginal model of 'two ways' education.

ABST362 Aboriginal Pedagogy 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours per week.

Pre-requisites: (ABST100) or (ABST150) plus 16 credits points at 200 level

Exclusions: Not to count with EDUF222, EDUE302 or EDUE402

Assessment: Essay (40%), Tutorial Presentation (30%), Community Task (30%)

Subject Description: Aboriginal Pedagogy provides an historical account of the pedagogical methods used in mainstream educational institutions and explores alternative, Indigenous philosophies and pedagogical practices. The subject encourages students to think critically about teaching and learning. It also helps to develop professional skills through consultation with Aboriginal communities.

ARTS112 People and Place 6cp

Autumn	Shoalhaven	Flexible
Autumn	Bega	Flexible
Autumn	Batemans Bay	Flexible
Autumn	Moss Vale	Flexible

Contact Hours: 2 hour seminar per week.

Assessment: Essay 1 (500-750 words) 15%; Annotated Bibliography (1,000 words) 30%; Essay 2 (1,200 words) 35%; Participation 20%

Subject Description: This subject will explore the idea of contested understandings of what it means to be Australian. The course will focus on a number of key areas and explore the ways in which a person's gender, ethnicity, class and citizenship status effect their experiences of living in this nation. The areas analysed are: the home, the paid work place, the environment and national spaces (memorials etc). The course also focuses on the ways in which some groups are excluded from important political, cultural and social and economic rights. In particular the exclusion of Indigenous people, women and migrants from full and equal participation is explored.

ARTS113 Society and Representation 6cp

Spring	Shoalhaven	Flexible
Spring	Batemans Bay	Flexible
Spring	Bega	Flexible
Spring	Moss Vale	Flexible

Contact Hours: 2 hours per week

Exclusions: ENGL120 An Introduction to Literature and Screen Studies

Assessment: take-home test (15%), library/research skills project (10%), essay one 20%, essay two 45%, participation 10%

Subject Description: This subject introduces the idea that reality is meaningful once represented through sign systems including an interaction of textual conventions, social practices and cultural knowledges. It provides examples of different texts (literary and non-literary), practice in analysis and expression of argument, focussed around the topics of text, nature, gender and education. It proposes that meanings are always multiple and negotiated though based within structuring codes/discourses.

ARTS211 Social Science Perspectives on Health and Illness 6cp

Autumn	Wollongong	On Campus
Autumn	Bega	Flexible

Contact Hours: Wollongong: 1 hour lecture, 2 hour seminar, Bega: 1hour video-conference fortnightly; 2hours tutorial face to face.

Exclusions: SOC111

Assessment: Small Group Poster Presentation and supporting documentation 25%, Research proposal (1500 words) 30%, Short essay (800 -1000 words) 20%, Skills Development Work Sheets 25%.

Subject Description: Australian society provides the context for an examination of the major perspectives that inform the analysis of the social power relations that shape patterns of health and illness and the provision of health care services. Students will apply the theoretical frameworks to contemporary issues in health and illness including the introduction of new

technologies, the practical meanings of care for different health professions and representations of health and illness in the popular media. The focus on small group learning activities means students have an opportunity to share knowledge and develop their ideas together.

ARTS301 Arts Internship 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours seminar(+ 48 hours Internship).

Pre-requisites: 96 credits points and selection interview with careers service professional & subject coordinator

Assessment: Reflective journal/portfolio/resume 50%; seminar Essay (3000 words) 50%

Subject Description: Arts Internship is a subject that crosses boundaries between theory and practice. At the end of your degree this is an opportunity to reflect upon and develop strategies for using your knowledge and skills developed through studies in Arts in the world of work and in the pursuit of your goals in your career and in life. Students will critically examine: the discourses and skills learned in the Faculty of Arts, their personal learning of these discourses and skills, the discourses and skills of the "world of work" . They should develop understanding of these discourses and skills and their learning of them by undertaking an Internship in a community or business environment. Placement in the Internship is facilitated by the University after negotiation with the student. The Internship is of 48 hours duration completed in addition to class contact time. Reflective learning activities and the Internship are integral in the University assessment of student outcomes in the subject. Students are encouraged to embark on understandings of the relevance of their studies to their post university endeavours.

ARTS401 Community and Environment Honours 48cp

Autumn	Shoalhaven	Flexible
Autumn	Bega/Batemans Bay	Flexible

Contact Hours: There will be 4 all day workshops comprising discussions for the two seminars. The workshops will be at a single location for students from all centres.

Pre-requisites: Major in Community and Environment with credit average for subjects above 100-level.

Assessment: 2 seminars and a literature review for thesis 50%; thesis 50%

Subject Description: This is an interdisciplinary program, comprising a thesis and coursework topics from within discipline areas of the Arts Faculty contribution to the BA (Community & Environment). Students will write a research thesis of approximately 15,000 words, and complete either two or three coursework units, the written work for which will total 12,000 to 15,000 words. Thesis and coursework supervision will be taken by academics at the University of Wollongong, arranged by the Honours Coordinator. Students will also be invited to participate in Honours events (e.g., seminars and presentations) held at the Wollongong Campus. Supervisory and coursework contact may include email, videoconferencing and WebCT.

ASIA299 Special Topics in South East Asian Studies 8cp

Summer 2004/05 Wollongong Flexible

Contact Hours: Contact Study Abroad Office for more information.

Assessment: Essays and examination

Subject Description: Students will undertake a subject in a Southeast Asian university. At present exchange agreements exist with Prince of Songkla University in Thailand, Gadjah Mada University in Indonesia and the University of Indonesia, enabling subjects from those universities to be taken as part of a Wollongong BA. Subjects from other universities can be taken by arrangement with the Subject Director, Associate Professor Adrian Vickers.

ASIA399 Special Topics in South East Asian Studies 8cp

Summer 2004/05 Wollongong Flexible

Contact Hours: Contact Study Abroad Office for more information.

Assessment: Essays and examination

Subject Description: Students will undertake a subject in a Southeast Asian university. At present exchange agreements exist with Prince of Songkla University in Thailand, Gadjah Mada University in Indonesia and the University of Indonesia, enabling subjects from those universities to be taken as part of a Wollongong BA. Subjects from other universities can be taken by arrangement with the Subject Director, Associate Professor Adrian Vickers.

AUST101 Australian Studies: Cultures and Identities 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lectures and tutorials per week.

Assessment: essay 1 (1,200 words) 30%; essay 2 (2,000 words) 40%; annotated bibliography 20%; participation 10%.

Subject Description: This subject introduces students to some of the important issues and academic debates about identities in Australia. It explores some of the principal features that characterise images of Australia, Australians and the Australian continent. It approaches the subject from an historical and cultural perspective and asks what 'being Australian' has meant to different people at different times, both for the social groups and individuals who have shaped dominant notions of national identity and those who have challenged them. What did it mean, for example, to Indigenous people, to women, to immigrants? The subject also critically examines expressions of Australian identity through some of its national rites and rituals such as Australia Day, Anzac Day, tourism, sport and national spectacles such as the Olympics.

AUST102 Australian Studies: Narrating the Nation 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours lecture/tutorials/lab per week.

Assessment: Short answer assessment; library research bibliography; class participation; research essay

Subject Description: This subject introduces students to different perspectives on the meaning of Australia and Australianness in the 19th and 20th centuries. It explores a series of key texts, which represent Australia, Australians and the Australian continent through a wide variety of genres. Students explore these ideas from a combination of historical, literary and cultural perspectives. The subject asks how Australia and being Australian has been represented by different people and at different times both by social groups and

individuals who have represented dominant notions of Australianness, and those who have challenged them.

AUST246 A Sociology of Australia's Indigenous People: Contemporary Issues 8cp

Spring Wollongong On Campus

Contact Hours: 1hr lecture; 2hr seminar per week.

Prerequisites: (24cp at 100 level incl 6cp in Sociology), (24cp at 100 level incl AUST101), (24cp at 100 level incl ENGL113), (24cp at 100 level incl HIST107), (24cp at 100 level incl ARTS112), (24cp at 100 level incl ABST100), (24cp at 100 level incl ABST150)

Assessment: Reflective journal 30%; Class participation 10%; Group project 20%; Final essay 40%

Subject Description: This subject analyses the present day position of Australia's indigenous people in their relations within Australian society. Persisting questions of social justice, land rights and self determination and representation supply the central foci of the subject. The subject emphasises both the particular cultural and historical contexts and the common themes in the indigenous experiences of Australian society. The issues that are to be considered include the various government policies, including health and education, their implementation and effects, land rights, civil rights and self determination and self government campaigns and national reconciliation.

AUST300 Twentieth Century Australian Literary Culture 8cp

Spring Wollongong Flexible

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega/ Moss Vale Flexible

Contact Hours: 1x3 hour seminar x 3wkly; +online interaction

Pre-requisites: (AUST101 and AUST246) or (AUST101 and HIST218) or (6cp of ARTS plus 8cp at 200 level)

Exclusions: HIST380 and ENGL371

Assessment: Bulletin Board Postings (1,000 words) 15%; essay 1 (1,500-2,000 words) 35%; essay 2 (1,500-2,000 words) 35%; participation 15%

Subject Description: This subject examines twentieth-century Australian literary culture in the context of contemporary critical theories of gender, "race" and class. Amongst other things, it examines the representation and critique of gender roles, the process by which national literary canons and national identity are constructed, and the manner in which imperialist ideology played a critical role in the representation of Aboriginal people and Aboriginality in the literature of the period

CCS 105 Introduction to Communication and Cultural Studies 6cp

Autumn Wollongong On Campus

Autumn Shoalhaven Flexible

Autumn Batemans Bay Flexible

Autumn Bega/ Moss Vale Flexible

Contact Hours: Wollongong: 1 hour lecture, 2 hours seminar, Other Campuses: 3 hours workshop.

Exclusions: COMS100

Assessment: Quizzes 30%; Essay 30%; Analysis 40%

Subject Description: This subject is an introduction to the concepts and terminology used in the fields of communication

and cultural studies. It aims to provide a range of critical tools with which to analyse, critique and interrogate communications processes, texts, and audiences. It introduces students to models of communication with a stress on the study of signs, discourses and narratives. Students explore the tension between the way that social practice tries to regulate and stabilise meaning and the tendency for meaning to proliferate.

CCS 207 Culture: Central Problems and Critical Debates 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hours tutorial per week.

Pre-requisites: (36 credit points)

Exclusions: Not to count with CCS107

Assessment: seminar papers & exercises 40%, 1 essay 60%

Subject Description: In this unit we will explore the concept of culture as developed within the discipline of cultural studies. It is an assumption of the subject that there is no one right way to understand culture. Thus the subject explores a variety of accounts of culture with a view to evaluating their uses and purposes. This will be achieved through an examination of a series of central problems and critical debates that have arisen during the development of cultural studies. Although much of the subject matter is of a theoretical nature, there will be an attempt to illustrate arguments and concepts with more practical and empirical case studies.

CCS 217 Film Form and Style 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour screening, 2 hours seminar hours per week.

Pre-requisites: (36 credit points)

Assessment: project/essay 50%, assignment 30%, seminar participation 20%

Subject Description: This subject is an introduction to the reading of film as a language and to cinema as an institution. It aims to introduce students to film analysis and to instruct students in how to watch films critically. The subject is divided into three complementary sections. The first part is devoted to considerations of film aesthetics, exploring aspects of form and style within classical Hollywood cinema. The second part concerns major theoretical approaches to film analysis, including (but not limited to) key readings on genre, spectatorship, authorship, ideology, and style.

The third part focuses on alternatives to Hollywood, looking at stylistic and formal differences (and similarities) of a range of different national cinemas, directors, and periods. This section provides students with opportunities to apply the concepts from the readings to specific film examples which they may have not seen before.

CCS 219 Australian Screen 8cp

Spring Wollongong Flexible

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega/ Moss Vale Flexible

Contact Hours: Flexible delivery, including screenings and online tutorials (3 hour equivalent per week).

Pre-requisites: (36 credit points)

Assessment: Journal 40%, Research project 40%, Movie Reviews 20%

Subject Description: This subject introduces students to the principles and policies which have informed the development of the Australian national cinema since the early twentieth century. Specific emphasis is placed on the regional history of cinema exhibition. Please note that this subject has no face-to-face tutorials, and therefore a significant online communication component. Effective participation will require weekly internet access.

CCS 300 Researching Subjectivity and Identity 8cp

Autumn Wollongong On Campus

Contact Hours: Autumn 1hr lecture, 2hr seminar, , , , , ,

Prerequisites: (36cp including 8cp in 200 level CCS)

Assessment: Group presentation of a research proposal. 15%; Group qualitative research plan. 2000 words. 25%; Individual research report and reflection. 3000 words 60%

Subject Description: This subject will explore what it means to be a person through ideas of subjectivity and identity as developed within cultural studies. It is assumed that there is no one right way to understand personhood and thus a variety of accounts of subjectivity/identity are examined and evaluated. Students will explore qualitative research methods appropriate to the exploration of identity. Seminar activity will combine theoretical exploration with the analysis of a series of research based case studies. Assessment will be by means of group research activity and individual reflection upon that process.

CCS 330 The Practices of Everyday Life 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week.

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: seminar Presentation 30%; Textual Exercise 30%; Essay 40%

Subject Description: This subject introduces students to a range of theories which enable the critical re-evaluation of the practices of everyday life in the context of popular culture. Students will critically re-evaluate everyday practices in relation to tactical consumption, unauthorised pleasures, oppositional uses and the unintended effects of power. Topics discussed include: kitsch, camp and the culture of trash; commodification and identity; indigeneity and race in popular culture; the codification of suburban and urban spaces; gender performance, sexual identity and the politics of drag.

CCS 333 Genre: Theory and Analysis 8cp

Spring Wollongong On Campus

Contact Hours: 3 hr lecture/screening; 2 hr seminar per week

Pre-requisites: (36cp including 8cp in 200 level CCS)

Assessment: Two quizzes 30%, Essay 25%, Research paper 35%, Participation 10%

Subject Description: This is a course in film genres, investigating the evolution and significance of key genres such as film noir, horror, fantasy and science fiction. The course examines the political and social contexts in which different genres emerge, their literary antecedents, and the philosophical questions they could be said to raise. Students will be introduced to a range of theoretical approaches to the analysis of film, and course materials draw on psychoanalytic, feminist, historical and poststructuralist writings, among others, to debate the meaning and significance of classic genre films from the 1930s to the present.

CCS 335 Electronic Cultures 8cp
Spring Wollongong On Campus
Contact Hours: 1 hr lecture, 2 hr tutorial per week
Pre-requisites: (36cp including 8cp in 200 level CCS)
Assessment: Short report 20%, seminar paper 30%, Essay/journal 40%, Participation 10%
Subject Description: This subject covers text, practices and impact of electronic culture in cyberspace or elsewhere. Students will consider how concepts of the body, gender, identity and community are formulated in the electronic environment; they will scrutinise notions of authoring and authority, reading and interactivity, and will explore issues of access and equity, and policies dealing with regulation, copyright and privacy. This subject complements Publishing Studies offered in CCS223 and CCS225.

CCS 337 Hollywood and American Culture 8cp
Autumn Wollongong On Campus
Contact Hours: 3 hr lecture/screening, 2 hr tutorial per week.
Pre-requisites: (36cp including 8cp in 200 level CCS)
Assessment: take-home exam 30%, research essay 50%, journal/participation 20%
Subject Description: A study of American cinema and its interaction with American popular and political culture, covering the development of the studio system; the transition from silent to sound; Hollywood's response to censorship demands; the representation of social, sexual and political issues in the 1950s in particular; and the relationship between American cinema and television to the end of the 1960s.

CCS 341 Screen Studies: Advanced seminar 8cp
Spring Wollongong Flexible
Contact Hours: 3 hrs online tutorial/screenings per week
Pre-requisites: (72 cp and an average of 70 or above, plus interview with subject co-ordinator)
Assessment: Report on group project: 40%; Essay, 30%; Journal, 30%
Subject Description: In 2004, this subject will be delivered as an online seminar in American Media and Cultural Studies. Places are strictly limited, and students can only enrol with the approval of the Program Convenor.

CCS 343 Directed Study 8cp
Autumn/ Spring Wollongong On Campus
Contact Hours: 3 hours seminar.
Pre-requisites: (36cp including 8cp in 200 level CCS)
Restrictions: Available only in special circumstances. Students can only enrol after consulting with and gaining the approval of the Convenor of Program.
Assessment: Assignments to be negotiated with the Subject Co-ordinator in the first week of session.

Subject Description: Directed reading, research and other investigative activities lead to the production of a major essay or report in a field of study selected by the student and approved by the Convenor of Program. Prospective students must have a Distinction average in CCS, unless in exceptional circumstances, and entry depends on the availability of staff.

CCS 351 Semiotics and Communication 8cp
Summer 2004/05 Wollongong On Campus
Contact Hours: 4 hr seminar per week.
Pre-requisites: (36cp including 8cp in 200 level CCS)
Assessment: Case Study 45%, Essay 30%, Reading Report 15%, Class Participation 10%
Subject Description: This subject will seek to explain and analyse communication and interaction processes in terms of patterns of verbal and non-verbal signs and language. Relevant semiotic and communication concepts and readings will be introduced. Subtopics include gestures and body language, conversation analysis, visual messages and communication media. Students will undertake an empirical case study.

CCS 352 Flashpoints, Contestations in Contemporary Australian Culture 8cp
Summer 2004/05 Wollongong On Campus
Contact Hours: 4 hour seminar per week.
Pre-requisites: (36cp including 8cp in 200 level CCS)
Assessment: seminar presentation 25%; seminar write-up 25%; major essay 50%
Subject Description: Contemporary Australian culture has been subject to perturbation as a consequence of a series of culture wars in which culture (and the culture) has become the site of contestation between discourses of the media, age, race and ethnicity, and gender. Focusing on a selection of these cultural flashpoints, this subject will examine moments of crisis in Australian culture via these discourses and the particular cultural practices and products involved.

CCS 357 Television Cultures 8cp
Spring Wollongong On Campus
Spring Shoalhaven Flexible
Spring Batemans Bay Flexible
Spring Bega/ Moss Vale Flexible
Contact Hours: 2 hour lecture/screening, 2 hour tutorial per week.
Pre-requisites: (36cp including 8cp in 200 level CCS)
Exclusions: Not to count with CCS257
Assessment: Participation 20%; Essay/research project 50%; Group presentation 30%
Subject Description: This subject surveys the major debates and issues involved in TV theory and criticism. It examines television as a social and cultural practice, looking at formal and aesthetic features of television genres, issues of representation and identity, and historical and technological developments of television in Australia within a global context.

CCS 400 Honours 48cp
Annual Wollongong On Campus
Contact Hours: 3 hour seminar per week.
Pre-requisites: 1. Major in CCS; 2. Students must have attained at least Distinction-level results in two or more 300-level subjects in CCS; 3. Students must complete an interview with the School Honours Co-ordinator to determine the suitability of their proposed research topic and to ensure that supervision support is available. (Please note that: (i) Pre-requisites may be waived in exceptional circumstances; (ii) Students enrolling with

a degree from another institution must meet equivalent pre-requisites).

Assessment: dissertation or project 50%, plus seminar papers, essays, projects, research reports etc as required in the particular units of a program of complementary studies arranged for each candidate 50%.

Subject Description: 1. A dissertation (or project+) of 15,000 words or equivalent on a topic developed in consultation with the student's supervisor and approved by the Head of School (24 cp); 2. A program of complementary studies comprised of coursework subjects and project work+ arranged in consultation with each student and approved by the Head of School (24 cp).

CCS 405 Joint Honours in Communication & Cult Studies and Another Discipline 48cp

Annual Wollongong On Campus

Pre-requisites: 1. Major in CCS; 2. Students must have attained at least Distinction-level results in two or more 300-level subjects in CCS; 3. Students must complete an interview with the School Honours Co-ordinator to determine the suitability of their proposed research topic, determine an appropriate course of study, and to ensure that supervision support is available. (Please note that: (i) Pre-requisites may be waived in exceptional circumstances; (ii) Students enrolling with a degree from another institution must meet equivalent pre-requisites).

Subject Description: This will consist of a course of studies approved by the Head of School in collaboration with the Head of the other academic unit concerned and will normally be composed of elements offered at 400-level by each unit.

ELL 151 English For Academic Purposes: A Second Language Perspective 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 2 hour lecture; 2 hour tutorial per week.

Pre-requisites: Minimum IELTS score of 6 for International students

Assessment: Classwork 10%, Written assignment 40%, Oral assignment 25%, Exam 25%

Subject Description: This subject provides an introduction to English for Academic Purposes primarily for Non-English Speaking Background (NESB) students who have undertaken their school studies in a language other than English. It will introduce and examine a general range of texts used in academic contexts, such as Explanation, Exposition and Discussion etc. It will focus on some of the key distinguishing features of academic writing.

ELL 152 English Language Studies 1 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours Lecture and 2 hours tutorials per week.

Pre-requisites: ELL151

Assessment: Class work 20%, Essay 60%, Examination 20%.

Subject Description: ELL152 introduces students from a non-English speaking background to a range of skills, resources and understandings which are vital for successful participation at university. The course has two strands, Culture and Language. In the Culture strand we examine some features of the Academic tradition on which the University is based. We will critically analyse these features and compare them with those in other traditions of learning. In the Language strand we examine a range of resources which assist you to produce written and

spoken texts in the academic style which is expected at university. In identifying and using these resources we will also be introducing an understanding of the basic structures and grammar of the English language. Throughout both strands, skills and strategies for listening, reading, writing and viewing in a tertiary context are explicitly introduced and practised.

ELL 161 English For Academic Purposes: A First Language Perspective 6cp

Autumn Wollongong On Campus

Autumn Shoalhaven Flexible

Autumn Batemans Bay Flexible

Autumn Bega/ Moss Vale Flexible

Contact Hours: 2 hour lecture; 2 hour tutorial per week

Assessment: Class work 20%, written assignment 60%, final test 20%

Subject Description: ELL161 introduces you to range of skills, resources and understandings which are vital for successful participation at university. The course has two strands, Culture and Language. In the culture strand we examine some features of the Academic tradition on which Wollongong University is based. We will critically analyse these features and compare them with those in other traditions of learning. In the Language Strand we examine a range of resources which assist you to produce written and spoken texts in the academic style which is expected at university. In identifying and using these resources, we will also be introducing an understanding of the basic structures and grammar of the English language. These understandings are further developed in other subjects within the English Language Studies program. Throughout both strands, skills and strategies for speaking, listening, reading, writing and viewing in a tertiary context are explicitly introduced and practiced.

ELL 171 An Introduction to Linguistics: The English Language 6cp

Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega Flexible

Contact Hours: 2hour Lecture; 1hour tutorial per week.

Exclusions: Not to count with ENGL130 or LANG110

Assessment: Analysis tasks 60%, essay 30%, participation 10%

Subject Description: ELL171 offers an introduction to the study of English language and linguistic theory. Its purpose is to explore the nature of spoken and written language and the relationship between language and the context in which it occurs. There will be a strong focus on the development of an understanding of the tools of linguistic analysis to describe grammar, meaning and context. The approach to language is a functional one: language is as it is because of what it does in real life situations.

ELL 271 English Language Studies 2 8cp

Autumn Wollongong On Campus

Contact Hours: 2hour lecture; 2hour tutorial per week.

Pre-requisites: (ELL171 & ELL151 & ELL152) OR (ELL171 & ELL161)

Exclusions: Not to count with ELL261

Assessment: assignments 50%, participation 10%, portfolio 10%, essay 30%

Subject Description: This subject is the first 200 level subject in the English Language Studies major. Students will be working with discipline specific language looking at the linguistic features that separate and define them. In particular, students will be investigating cohesion and thematic development across a selected range of disciplines.

ELL 310 Language and Communication in a global context 8cp

Spring Wollongong On Campus

Contact Hours: Spring 3hrs lecture/seminar.

Prerequisites: 24 credit points of BA subjects

Assessment: Test (30%), class-based tasks and presentations (40%), assignment (30%)

Subject Description: This subject examines the impact of globalisation on communication with a specific focus on the role and functions of English. It traces the spread of English across the world as a native, second and foreign language and discusses its impact on the status of other languages. It pays particular attention to the use of English in intercultural encounters. Another focus is on analysing and producing texts characteristic of global English in business, the media and education.

ELL 371 English Language Studies 3 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour tutorial per week.

Pre-requisites: ELL271

Exclusions: Not to count with ELL361

Assessment: Oral and written assignment 50%, portfolio 10%, participation 10%, essay 30%

Subject Description: This subject follows ELL271. Students will be investigating abstraction, technicality, attitude and opinion across a selected range of disciplines.

ELL450 Honours in English Language Studies 48cp

Annual Wollongong On Campus

Pre-requisites: a major in ELL (credit average) or equivalent.

Assessment: Dissertation 50%. Essays and oral presentation 50%

Subject Description: A BA(Hons) in English Language Studies comprises of coursework (50%) and a supervised thesis (50%), which has been designed to prepare students for further research in future employment or future study. Honours in ELL requires the student to: (1) write three major essays totalling 11000-12000 words focusing on i) theoretical models in linguistics, ii) topics in English Language Studies, and iii) methodologies in linguistics; (2) prepare and present orally a research proposal on a topic in English Language Studies to be approved by the ELL Honours Coordinator; (3) write a 15000 word dissertation based on research proposed in (2) above; and (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled.

ENGL120 An Introduction to Literature and Screen Studies 6cp

Autumn Wollongong On Campus

Contact Hours: 2 x 1 hr lectures and 1 hr tutorial per week.

Assessment: 2 essays 35% & 45%; take-home exercise 10%; library skills test (ungraded but compulsory); class participation 10%.

Subject Description: This subject is an introduction to the 'reading' and criticism of texts in various forms and media. Students will be introduced to the principles, processes and methodologies involved in the critical 'reading' of texts drawn from prose fiction, poetry, advertising, journalism, theatre, film, television, etc. The texts selected for study will be treated on their own individual terms as expressive communicative examples of the various forms and media.

ENGL121 Text and Gender 6cp

Spring Wollongong On Campus

Contact Hours: 3 hrs per week

Exclusions: (ENGL108) or (ENGL110)

Assessment: 2 Essays, Class presentation, Take-home exam

Subject Description: This subject is primarily concerned with the definition and construction of the notions 'female' and 'male' in literary and cinematic texts. These texts will be drawn from historical periods from the Renaissance to the present and include poems, pamphlets, stories, novels and the screen texts of cinema and cyberspace.

ENGL228 English Renaissance Literature and Culture 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2hour seminar per week.

Pre-requisites: At least 6 cp at 100-level English

Assessment: 1 essay; 1 tutorial paper; 2 short critical exercises

Subject Description: This subject introduces students to the literature and culture of the English Renaissance. It focuses on a diversity of texts including plays, poetry, autobiographical writing, historical narrative, and contemporary observations; texts written by a number of major and minor writers of the period (eg Shakespeare, Donne, Milton, Thomas Kyd, 'Ephelia', Mary Rich, Thomas Hariot, Walter Raleigh, Queen Elizabeth and others). The subject concentrates on the ways these texts inform and are informed by three major cultural contexts: the historical, the social, and the literary/generic.

ENGL229 Romantics & Victorians: English Literature From 1790-1900 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: At least 6 cp at 100-level English

Assessment: 1 take-home test 30%; 2 essays 35% each

Subject Description: This is a study of the revolution of imagination. The literature in this subject represents an influential part of the cultural production of a century of European history that includes the French, Industrial and Scientific Revolutions - a period of exciting, daunting upheaval in political, social, scientific and aesthetic theory and which includes the writings of the Romantic Poets, the Bronte sisters, Tennyson, Barrett-Browning, Hardy, George Eliot and Dickens.

ENGL230 Page to Stage: Modes of Performance 8cp**Autumn** Wollongong On Campus**Contact Hours:** 1 hour lecture; 2 hour seminar per week.**Pre-requisites:** At least 6 cp at 100-level English**Assessment:** 1 essay; 1 seminar presentation; theatre review; class participation

Subject Description: From ancient Greece through to contemporary Hollywood, dramatic performance has functioned to entertain, to educate, and to call for change. Today's TV and cinema culture has a rich dramatic heritage of which we too often remain unaware. This subject provides an introduction to the study of performance through text, theory, and practice. Elements of performance will be explored through the study of specific scripts, and through practical work drawn from various performance modes. The connections between performances and their cultural contexts will be explored, with special emphasis on gender, sexuality, politics and nation. We will also consider the crucial influence of genre - whether comedy, tragedy, satire, or morality play - on performance and dramatic convention. The texts in the course will range from Greek tragedy through the medieval and Renaissance stages to the avant garde and experimental challenges of the twentieth century.

ENGL243 Fantasy and Children's Literature 8cp**Summer 2004/05** Wollongong On Campus**Contact Hours:** 2 hr lecture, 2 hr tutorial per week**Pre-requisites:** At least 6 cp at 100-level English**Assessment:** 2 practical exercises (15% each); 1 tutorial paper (30%); 1 major essay (30%) - to be confirmed at first lecture

Subject Description: This subject begins with a discussion of the fairy tale, its uses, meaning and relevance in today's world. This will be followed by a study of modern fantasy literature for children and young adults by British, American and Australian authors.

ENGL248 Chaucer 8cp**Spring** Wollongong On Campus**Contact Hours:** 1 hour lecture; 2hour seminar per week.**Pre-requisites:** (At least 6 cp at 100-level English)**Assessment:** 2 essays; 1 translation test

Subject Description: This subject involves the study of some of The Canterbury Tales of Geoffrey Chaucer and also provides an introduction to the literary and cultural context of his time. It considers the construction and representation of gender, sexuality, love, marriage, youth and age. The subject is designed to make Chaucer accessible to modern readers, who will find the texts racy, bawdy, witty, ironic, in their coverage of a wide range of human experience.

ENGL255 Eighteenth Century Literature and Culture 8cp**Spring** Wollongong On Campus**Contact Hours:** 1 hour lecture; 2 hour seminar per week.**Pre-requisites:** At least 6 cp at 100-level English**Exclusions:** ENGL256**Assessment:** 1 essay; 1 tutorial paper; 2 short critical exercises

Subject Description: Eighteenth-century English literature ranges from the biting social satire of Pope and Swift to the

increasing popularity at the end of the century of the 'new' genres of Feeling - the Gothic and the novel of Sensibility. The period is known for its comic writing but this subject also focuses on the work of women writers - those 'other Augustans' whose skills of social observation considerably broaden our understanding of the period.

ENGL259 An Introduction to Canadian Literature 8cp**Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture, 2 hr seminar per week**Pre-requisites:** At least 6 cp at 100-level English.**Assessment:** 1 essay 50%; 1 presentation & report 40%; class participation 10%

Subject Description: This subject will focus primarily on contemporary Canadian fiction, but it will also offer a wider context for an appreciation of this country's literature and culture through an examination of a range of texts: exploration journals, poetry and fiction by First Nations and Canadian writers (including, Michael Ondaatje and Margaret Atwood).

The texts for this subject illustrate a wide range of issues, styles and preoccupations in Canadian literature.

ENGL260 Nineteenth Century Australian Literary Culture 8cp**Autumn** Wollongong Flexible**Autumn** Shoalhaven Flexible**Autumn** Batemans Bay Flexible**Autumn** Bega/ Moss Vale Flexible**Contact Hours:** 1x3hour seminar every third week; +online interaction per week.**Pre-requisites:** (At least 6 cp of English at 100-level) or (ARTS113)**Exclusions:** (ENGL236) OR (ENGL258) OR (ENGL291) OR (CCS 215)**Assessment:** 1000 word essay 30%; 2000 word essay 40%; 7 Best bulletin board postings 15%; Participation 15%

Subject Description: This subject examines nineteenth-century Australian literary culture in the context of contemporary critical theories of gender, race, class and colonialism. Amongst other things, it examines the representation and critique of gender roles, the process by which national literary canons and national identity are constructed, and the manner in which colonial ideology played a critical role in the representation of Aboriginal people and Aboriginality in the literature of the period.

ENGL264 Modernism 8cp**Spring** Wollongong On Campus**Contact Hours:** 1 hour lecture; 2 hour seminar per week.**Pre-requisites:** At least 6 cp at 100-level English**Exclusions:** (ENGL253)**Assessment:** 1 take-home test 30%; 2 essays 35% ea - to be confirmed at first lecture

Subject Description: This subject focuses on the theory and cultural production of modernism from the 1890s to the 1940s and the exciting textual dynamic that brings the disciplines of verbal and visual arts, science and technology into tension. Literary texts by Kafka, Synge, Camus, Lawrence, Eliot, Woolf, Yeats, Stein, Faulkner and Joyce will be read in conjunction with texts from science, psychology, art and music.

ENGL334 Critical Theory: Development and Debates 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hr seminar per week**Pre-requisites:** (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)**Assessment:** 2 essays 30% and 40%; 1 seminar presentation 20%; class participation 10%

Subject Description: This subject is an introduction to several critical movements that have currency in contemporary literary and cultural studies: structuralism, poststructuralism, psychoanalysis, materialist and historicist approaches, feminism and theories of gender and sexuality, and theories of post-coloniality and ethnicity. The subject explores the tensions and connections between these movements, attending to the ways in which each movement approaches questions of subjectivity and textual meaning. Students are also given the opportunity in one essay to deploy theoretical concepts through the reading of a literary text.

ENGL337 Sex, Power and Chivalry: Medieval to Modern Literature 8cp

Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Bateman's Bay Flexible

Spring Bega/ Moss vale Flexible

Contact Hours: 1hr lecture, 2hr seminar**Pre-requisites:** (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points) or (ARTS113 and 6 credit points of ENGL and any other 6 credit points)**Assessment:** 1 essay; tutorial presentation; journal; class participation

Subject Description: This subject begins by providing an introduction to some of the major chivalric texts of the later Middle Ages, including Malory's tales of King Arthur, the love lyrics of the troubadours and the female troubairitz, and the lais of Marie de France. It then goes on to examine Cervantes' and others' famous early satires on knightly masculinity, Victorian writers' nostalgic revisitation of Camelot, modern popular romance fiction, the postmodern queer chivalry of Kathy Acker, and the hardbitten knights of Hollywood Westerns. It takes a literary-historical approach, exploring the fascinating and highly complex relationship between gender and social rank in chivalric texts, and traces these texts' changing preoccupation with the issues of power, heroism, sexuality, secrecy, fidelity and betrayal. No previous knowledge of medieval literature is assumed.

ENGL340 Directed Study in English 8cp

Autumn/ Spring Wollongong On Campus

Contact Hours: negotiated.**Pre-requisites:** (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)**Co-requisites:** (12cp of 300 level ENGL)**Restrictions:** Students MUST have a DISTINCTION average in all English subjects.

Subject Description: Directed reading, research and other investigative activities lead to the production of a major essay/report in a field of study selected by the student. Approval must be sought from Convenor of English Studies Program prior to enrolment. Entry to subject depends on availability of staff to supervise student in particular course of study.

ENGL345 Twentieth Century Women Writers 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture + 1.5hour tutorial per week.**Pre-requisites:** (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)**Assessment:** 2 take-home tests; 1 presentation and paper; 1 essay

Subject Description: This subject deals with the work of six modern women writers: Virginia Woolf, Katherine Mansfield, Sylvia Plath, Dorothy Hewett, Alice Walker and Jamaica Kincaid. Of particular concern are the cultural processes which so often lead to the mythologising of a woman writer's life, and the way this life/myth interacts with interpretations of that writer's work.

ENGL365 Nineteenth-Century Women Writers 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture and 1.5 hour tutorial per week.**Pre-requisites:** (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)**Assessment:** 1 essay; 1 tutorial paper; 1 take-home exam

Subject Description: This subject looks at the work of women writers in England, Australia and the United States in the Nineteenth Century, through different types of writing - fiction, poetry, diaries and journalism. The subject examines the establishment of the female writing self within the cultural structures of the nineteenth century and the engagement of that self with the social and literary conventions of that time..

ENGL366 Literatures of Colonised Cultures 8cp

Spring Wollongong On Campus

Contact Hours: 3 hour seminar per week.**Pre-requisites:** (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points).**Assessment:** One take-home test 15%; one seminar paper 30%; one essay 45%; class participation 10%

Subject Description: This subject offers a survey introduction to writing in English from Africa, the Caribbean, the Pacific or South East Asia. (The focus region will rotate depending on staff availability. Refer to the English Studies Program for details.) Issues of colonialism, cultural identity, language use, genre transformation and cultural politics will be discussed. Texts will normally include representative stories, novels, drama, poetry and film.

ENGL371 Twentieth Century Australian Literary Culture 8cp

Spring Wollongong Flexible

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega/ Moss Vale Flexible

Contact Hours: 1x3hr Seminar every third week and online interaction.**Prerequisites:** (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points) or (ARTS113 and 6 credit points of ENGL and any other 6 credit points)

Assessment: 1000 word Bulletin Board posting 15%; 1500-2000 word essay 35%; 1500-2000 word essay 35%; Participation 15%

Subject Description: This subject examines twentieth-century Australian literary culture in the context of contemporary critical theories of gender, "race" and class. Amongst other things, it examines the representation and critique of gender roles, the process by which national literary canons and national identity are constructed, and the manner in which imperialist ideology played a critical role in the representation of Aboriginal people and Aboriginality in the literature of the period

ENGL374 From Page to Screen 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hr seminar per week

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points).

Assessment: 1 paper 40%; 1 take-home test or practical critique 20%; 1 presentation and report 30%; participation 10%

Subject Description: This subject will examine the worlds of literature and film as separate entities and the fascinating third world which they create when they come together.

Using adaptation theory the subject will examine some of the many difficulties which are encountered when a book is brought to the screen, or when a film is translated into a novel.

ENGL376 Representing India 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week.

Pre-requisites: (At least 6cp of 100 level ENGL and 6cp of 200 level ENGL and any other 6 credit points)

Assessment: Essay 40%; Book or film review 20%; Class presentation/write-up 30%; Participation 10%

Subject Description: An introductory survey of novels, stories, poems, drama and film from/about India. Attention will be given to key cultural and historical contexts for writing, and selected critical concepts (e.g., orientalism, subalternity, issues of 'third world' feminism) will be introduced.

ENGL400 English IV Honours 48cp

Annual Wollongong On Campus

Contact Hours: seminars & meetings.

Pre-requisites: Major in English at credit average

Restrictions: Entry to the Honours Year shall be determined on the advice of the Honours Co-ordinator and Convenor of Program

Subject Description: The Honours course consists of three subjects and a dissertation of 15,000 words. Course work constitutes 60%, and dissertation 40% of the final mark. Supervision must be arranged through the Honours Co-ordinator, in consultation with the Convenor of Program. Offerings are subject to the availability of staff. Students may be able to take subjects, other than English Studies subjects, after consultation with the Honours Co-ordinator.

ENGL403 Combined Honours 48cp

Annual Wollongong On Campus

Contact Hours: seminar & meetings,

Pre-requisites: Major in English at credit average.

Subject Description: The combined Honours course will consist of a program of study approved by the Convenor of the English Studies Program in collaboration with the Convenor of the other Department or Program concerned. The course will normally be composed of elements offered at 400-level by the two Departments or Programs.

ENGL499 Special Study 8cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 2 hour seminar per week

Pre-requisites: Negotiated between Convenor of English Studies and Convenor of other Program involved.

Restrictions: STUDENTS MUST HAVE APPROVAL OF CONVENOR OF PROGRAM PRIOR TO ENROLLING.

Subject Description: This subject is designed to enable Honours students from other departments or programs to take one of the subjects in the English Studies Program Honours course. Enrolment is subject to the approval of the Convenor of Program.

EURO220 The European Union: Post-war Integration, 1945 to 1995 8cp

Spring Wollongong On Campus

Contact Hours: 2 hr lecture, 1 hr tutorial per week.

Prerequisites: (6cp of HIST) or (AUST101) or (6cp of POL)

Assessment: Summary of article 15%; tutorial presentation 15%; 1 essay 30%; exam 30%; tutorial participation 10%

Subject Description: This subject identifies and examines the political, economic and social processes driving European integration from the end of World War Two to 1995. It explores the thinking behind and the development of the European Economic Community (EEC), the pivotal role of France and Germany in European integration, the relationship between nation states and supranational institutions, and the implications for Europe of the Cold War and collapse of the Soviet bloc.

EURO320 Nations without States in the European Union 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours per week lecture/seminar per week.

Exclusions: EURO210

Assessment: Research project 30%; Essay 25%; Take-home exam 10%; Presentation 10%; Film commentary 15%; Participation 10%

Subject Description: This subject aims to study a range of European indigenous minorities and the dynamics of their relationship not only with the Nation-States within which they are situated, but also with each other. It will look at the historical, political and economic integration of these minorities into the wider state and how the rapid political and economic changes occurring in the European Union (EU) affect these relationships.

EURO401 European Studies Honours 48cp

Annual Wollongong On Campus

Contact Hours: 2 hr seminar per week.

Prerequisites: 70% average in subjects included in the European Studies major

Assessment: Thesis 15,000-18,000 words (50%) Essay 4,000-6,000 words (20%) Seminar Paper 4,000-6,000 words (20%) Research report 1,500 words (10%)

Subject Description: EURO 450 is the Honours year for the multidisciplinary major in European Studies. The structure of the Honours program of study will be arranged according to the disciplinary interests of enrolling students and will be decided after discussion between the Subject Co-ordinator and the relevant major co-ordinator within the Faculty of Arts or the relevant subject co-ordinator outside the Faculty if the Honours program involves a discipline outside the Faculty of Arts.

FREN110 France and the French: The Essentials 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hours lecture/seminar per week.

Assessment: two essay outlines 40%, one essay 30%, short quizzes 10%, final test 10%, tutorial performance 10%

Subject Description: This subject aims to introduce students to specific geographical, historical, cultural forces and social frameworks which contributed to shape modern France and its people. It seeks to provide essential information which forms a very basic part of every French speaker's consciousness by focusing on some of the elements of French culture which every French person possesses after finishing the minimum required education. The rationale behind such a subject is that such knowledge is assumed by every writer, journalist, film maker and students need to know that context in order to understand the various works they are studying in the Program.

FREN151 French IA Language 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours lecture/practical per week.

Assessment: assignments, tests

Subject Description: This subject, a semi-intensive course, is the entry point to the French major for beginners or near-beginners in French. There is a dual focus on communicative and structural aspects of the language. Listening, speaking, reading and writing skills are developed through a combination of the classroom activities and assignments. Grammar and speaking skills are supported by computer-based activities. Oral and written assessment tasks are continuous throughout the session.

FREN152 French IB Language 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours lecture/practical per week.

Pre-requisites: FREN151

Assessment: assignments, tests

Subject Description: The program begun in FREN151 is sustained and developed, advancing students' proficiency in listening, speaking, reading and writing, and emphasising both communicative and structural aspects of the language. Students read a set of contemporary French short stories and items from current newspapers. Grammar and speaking skills are supported by computer-based activities. Oral and written assessment tasks are continuous throughout the session.

FREN210 France in the Twentieth Century 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours lecture/seminar per week.

Assessment: Two essays 50%; seminar paper 20%; and periodic assessment 30%

Subject Description: The aim of this subject is to provide an understanding of contemporary French society by tracing the main movements that have occurred over the past three decades in French history, culture and politics. Lectures will cover topics such as political institutions, the French economy, education, immigration, women's rights, and technological change.

FREN251 French IIA Language 8cp

Autumn Wollongong On Campus

Contact Hours: 4 hours lecture/practical per week.

Pre-requisites: (FREN152) or (approval of Head of Program on basis of HSC French).

Assessment: assignments, presentations, tests

Subject Description: This subject is the entry point to the French major for students with a sound pass in 2U HSC French (or equivalent), and the second year of language studies for beginners or near-beginners.

Language skills are developed and consolidated through the study of print, audio and video materials; current affairs; a systematic review of basic grammar; listening and conversation activities; and exercises in written expression and reading comprehension. Revision and maintenance of core grammar are achieved through a program of computer-based exercises.

FREN252 French IIB Language 8cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 4 hours lecture/practical per week.

Pre-requisites: FREN251

Assessment: assignments, presentations, tests

Subject Description: The program for FREN251 is continued and expanded.

FREN351 French IIIA Language 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lecture/practical per week.

Pre-requisites: FREN252

Assessment: assignments, tests

Subject Description: The subject has analytical and functional components. A study is made of a wide range of styles and registers of written French, including literary, business and commercial texts. The development of students' spoken and written expression is built on the study of current affairs material and contemporary cultural phenomena, and on everyday communication needs. Source materials are multimedia - audio, video, print and Internet. Sensitivity to language structure is enhanced through translation exercises, detailed textual analysis and advanced grammar.

FREN352 French IIIB Language 8cp

Spring Wollongong On Campus

Contact Hours: 3 hours lecture/practical per week.

Pre-requisites: FREN351

Assessment: assignments, tests

Subject Description: The program for FREN351 is continued and expanded.

FREN361 French IIIC 8cp**Autumn/ Spring** Wollongong On Campus**Summer 2004/05** Wollongong On Campus**Contact Hours:** 1 hour seminar, 2 hours supervised work pw.**Pre-requisites:** FREN252**Assessment:** set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff. Topics, as determined by the Coordinator for French, will be chosen from an area of French language, literature or civilisation and provide a program of advanced work complementing the student's prior studies in French.

FREN362 French IIID 8cp**Autumn/ Spring** Wollongong On Campus**Summer 2004/05** Wollongong On Campus**Contact Hours:** 1hour seminar, 2 hours supervised work pw.**Pre-requisites:** FREN252**Assessment:** set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff. Topics, as determined by the Coordinator for French, will be chosen from an area of French language, literature or civilisation and provide a program of advanced work complementing the student's prior studies in French.

FREN391 French Study Abroad A 8cp**Autumn/ Spring** France On Campus**Contact Hours:** determined by host university,**Assessment:** not available

Subject Description: Students taking this subject will undertake an approved course of studies at a French University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date from Australia. Any variation to the initial proposal must be approved by the Head of Program and approval will be given only in exceptional circumstances.

FREN392 French Study Abroad B 8cp**Autumn/ Spring** France On Campus**Contact Hours:** to be determined by host university,

Subject Description: Students taking this subject will undertake an approved course of studies at a French University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date from Australia. Any variation to the initial proposal must be approved by the Head of Program and approval will be given only in exceptional circumstances.

FREN393 French Study Abroad C 8cp**Autumn/ Spring** France On Campus**Contact Hours:** to be determined by host university,**Assessment:** not available

Subject Description: Students taking this subject will undertake an approved course of studies at a French University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date from Australia. Any variation to the initial proposal must be approved by the Head of Program and approval will be given only in exceptional circumstances.

FREN450 French IV Honours 48cp**Annual** Wollongong On Campus**Pre-requisites:** FREN352**Assessment:** Dissertation 50%. Essays and oral presentation 50%

Subject Description: To be awarded a BA(Hons) in French students must: (1) write a 15000 word dissertation based on the student's own supervised research on a topic in French studies to be approved by the French Honours Coordinator. The dissertation will be assessed by one internal and one external examiner; (2) write two to three major essays totalling 11000-12000 words focusing on designated theoretical issues, current academic debate, or methodological processes; (3) deliver an oral presentation of the research proposal; (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled. At least one of the written assessment items must be in French and at least one in English, the mix to be determined by the French Honours Coordinator. The oral presentation may be delivered in either French or English

HIST107 Empires, Colonies and the Clash of Civilisations 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hours per week lectures, tutorials and WebCT per week.**Assessment:** Essay 35%, examination 25%, report 15%, tutorial paper 15%, participation 10%.

Subject Description: Examines the history of empires and colonisation with particular emphasis on the way in which those empires interacted and clashed especially European and Islamic empires. Major themes include theories of empire building and colonisation, relations between indigenous populations and imperial authorities, the roles of religion, militarism and commerce in empire. Empires to be studied could include: Mongol, Ottoman, Chinese, Mughal, Iberian, Dutch, British.

HIST108 War, Dictatorship and Propaganda in Europe 1918-1945 6cp**Spring** Wollongong On Campus**Contact Hours:** 3 hours per week lectures, tutorials and WebCT per week.**Assessment:** Essay of 1,500 words 45%; examination 30%; tutorial exercises and participation 25%.

Subject Description: This subject compares the Soviet and Nazi dictatorships. It examines the historical roots, political systems, uses of violence, everyday life and political imagery of the Soviet Union and Nazi Germany between the wars. It compares the leadership style of Hitler and Stalin and their contribution to the outbreak and course of World War Two. This subject also compares the Soviet and Nazi dictatorships with the militarist government in Japan.

HIST121 Dispossessed, Diggers and Democrats: Australia 1788 to 1888 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week lectures & tutorials per week.

Assessment: 2 essays 35% each; tutorial presentation and annotated bibliography 10%; tutorial exercise 10%; tutorial participation 10%.

Subject Description: This subject focuses on history from below the extraordinary experiences and contributions of ordinary people in colonial Australia. It examines the British dis/possession of Australia; the character of penal society and the transformation to free society; the interaction of European and Aboriginal societies; European exploration and the politics of land ownership; the gold rushes; ethnicity and race in colonial society; gender relations and power; the development of a working class and labour movement; the dominance and impact of the middle class culture and ideology of progressive liberalism; and the changing character of work and consumption.

HIST203 Australians and the Great War 8cp

Autumn Wollongong On Campus

Contact Hours: 1hr lecture, 2hr seminar per week

Prerequisites: (6cp of HIST) or (6cp AUST) or (6cp of POL) or (6cp of ARTS)

Assessment: Essay 3000 words (30%) , Document exercise 500 words (10%), Tutorial presentation and bibliographical review 100 words (20%), Examination (30%), Participation (10%)

Subject Description: Examines the impact of war on European Australian society to 1918 with an emphasis on the Home Front. Major themes examined include the geopolitical context of empire, enlistment and conscription, women and families in wartime Australia, Indigenous Australians and war, social change and political change, religion, propaganda, prisoners and internees, digger and Anzac as national building myths and the nature of commemoration. Selected campaigns in which Australians played a significant part will be acknowledged.

HIST210 The European Union: Post-war Integration, 1945 to 1995 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture plus 1 hour tutorial per week.

Pre-requisites: (6 cp of HIST) or (AUST101) or (6cp of POL)

Assessment: Essay 35%, exam 35%, tutorial presentation 20%; tutorial participation 10%

Subject Description: This subject identifies and examines the political, economic and social processes driving European integration from the end of World War Two to 1995. It explores the thinking behind and the development of the European Economic Community (EEC), the pivotal role of France and Germany in European integration, the relationship between nation states and supranational institutions, and the implications for Europe of the Cold War and collapse of the Soviet bloc.

HIST218 Consensus, Conflict and Culture: Australia 1888-1988 8cp

Autumn Wollongong On Campus

Autumn Shoalhaven Flexible

Autumn Batemans Bay Flexible

Autumn Bega/ Moss Vale Flexible

Contact Hours: On Campus: 1 hour lecture, 2 hour tutorial, Flexible: 3 hours lectures and tutorials per week.

Pre-requisites: (6 cp of HIST). or (AUST101) or (6cp of ARTS).

Assessment: Essay 1 30%; essay 2 45%; tutorial presentation and annotated bibliography 15%; participation 10%

Subject Description: Examines the history of Australians and their society in the second century of European settlement. Focuses on how Australians understood their society, and how those understandings helped shape Australian history. Topics studied are class and gender in the 1890s; nation making; indigenous Australians; modernization ; impacts of wars; immigration; industrialisation; the making of a consumer society; gender and ethnicity politics; 1960s social protest and transformations.

HIST239 A Cultural History of Water 8cp

Spring Wollongong On Campus

Contact Hours: 1hr lecture, 2hr seminar per week

Prerequisites: (6cp of HIST)

Assessment: Essay 2500 words (30%), Research paper 2500 words (40%), Tutorial presentation and bibliographical review 1000 words (20%), Participation (10%)

Subject Description: This course focuses on the history of water as central to Australian culture. Our watery obsession has taken many forms: the fragility of isolated colonial outposts oriented to a European home; across the sea; the myth of an inland sea; the hopes invested in large-scale irrigation; the cult status of our Olympic swimmers; the surf culture for which Australia has become so famous. This course is intended to offer a broad-ranging and multi-disciplinary approach to the cultural meanings that have come to adhere to this ubiquitous, but increasingly fragile resource, and will place particular emphasis on the cultural significance of water in the Illawarra region.

HIST291 Film and History 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture; 2hour tutorial per week.

Pre-requisites: (6 cp of HIST) or (AUST101) or (6cp of ENGL) or (6cp of CCS) or (6cp of POL).

Assessment: Introductory exercise (500 words) 5%; tutorial presentation 10%; WebCT postings 25%; essay or film analysis (2000 words) 30%; review exercise (1000 words) 20%; participation 10%.

Subject Description: Film is a powerful tool when it comes to representations of the past, frequently commanding more authority than the works of scholars. Using selected examples, this subject examines the use of film as an interpretive tool in historical representation, setting a film version of selected events against the interpretations of scholars. History, rather than the medium, is the focus of the subject.

HIST300 Reporting War: A History 8cp**Spring** Wollongong On Campus**Contact Hours:** 3 hrs lecture/ tutorials/ WebCT per week.**Pre-requisites:** (14 cp of HIST incl 8cp at 200-level Hist).**Assessment:** Short answer assessments 20%; Class participation 10%; Research essay 40%; Examination 30%**Subject Description:** This subject deals with the relationship between war and media in the twentieth century. It critically examines the conventions and clichés of war reporting as well as representations of war in literature and film. It analyses the role of media and public opinion in encouraging and discouraging war. The subject surveys the major conflicts of the twentieth century and case studies are drawn from World Wars One and Two, the Vietnam and Gulf Wars as well as more recent conflict in Europe and East Timor.**HIST318 The Making of the Modern Australian Woman 8cp****Autumn/ Spring** Wollongong On Campus**Contact Hours:** 3 hrs lecture/ tutorial per week.**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level).**Assessment:** 2 seminar papers 60%; research paper 30%; tutorial participation 10%**Subject Description:** Examines the major forces determining the position of women in twentieth century Australia. Topics include the domestic ideology, the demographic transition of the late nineteenth century, structural change in the economy, widening educational opportunities and the growth of tertiary sector employment for women. A major focus is the interaction of ethnicity, class and gender in constructing the diverse social category of womanhood.**HIST325 Theory and Method of History 8cp****Spring** Wollongong On Campus**Contact Hours:** 2 hour seminar per week.**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level)**Assessment:** Minor essay 35%; research proposal 50%; participation 15%**Subject Description:** Explores theory and practice of contemporary historical enquiry. Theoretical issues include: causation in historical enquiry, types of explanation, facts versus values, varieties of history writing, the production and status of historical knowledge. Methodology issues include: formulating research problems, planning and undertaking research, understanding and using secondary and primary sources, accessing and retrieving research information.**HIST334 Regional History 8cp****Autumn** Wollongong On Campus**Autumn** Shoalhaven Flexible**Autumn** Batemans Bay Flexible**Autumn** Bega/ Moss Vale Flexible**Contact Hours:** 1hours lecture, 2 hour tutorial and WebCT per week.**Pre-requisites:** (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp at 200-level) or (AUST101 and POL230) or (POL230 and 6cp of HIST at 100-level) or (14cp of ARTS) or (6cp of ARTS plus 8cp at 200-level).**Assessment:** Essay of 3,000 words 40%; book review of 1,500 words 20%; seminar presentation with annotated bibliography 20%; WebCT discussion 20%**Subject Description:** Regional studies approach history from the perspective of place. They examine the response of regional and local communities to the general responses identified by historians. This subject examines the nature of regional identity, place and landscape using both theoretical literature and case studies. The regions chosen can vary from year to year.**HIST340 New Approaches to Australia Urban and Rural Working Class History 8 cp****Autumn** Wollongong On Campus**Contact Hours:** Autumn 1hr lecture, 2hr seminar per week**Prerequisites:** (14cp of HIST with 8cp HIST at 200 level) or (AUST101 with 8cp HIST at 200 level) or (14cp of AUST with 8cp AUST at 200 level)**Assessment:** Essay 1: Literature review 40%, Essay 2: Research Project 40%, Class presentation/ participation 20%**Subject Description:** This subject examines new approaches to the social and cultural history of the Australian working class between 1840 and 1930. It provides a critical examination of the relationship between working class lived experience of capitalism and the development of individual and collective working class responses, identities and cultures. The subject examines class experience from the point of view of gender, ethnicity, Aboriginality as well as class. To do so It draws on working class biography, oral history, labour process history, feminist labour history, rural and urban history.**HIST341 The Struggle for Europe, 1494-1713 8cp****Autumn** Wollongong On Campus**Contact Hours:** Autumn 1hr lecture, 2hr tutorial, , , , , ,**Prerequisites:** (14cp of HIST including 8cp HIST at 200 level)**Assessment:** Research essay 35%, Tutorial presentation 25%, 2 hour final examination 30%, Tutorial participation 10%**Subject Description:** This subject will examine the rivalry and wars between two “new monarchies”, France and Spain, as they fought across western Europe in the 16th and 17th centuries to gain the balance of power, and then fought for the control of Spain itself. It will look at the Franco-Spanish wars between 1494 and 1713, wars which determined not only the future political map of Europe but also the nature of warfare**HIST342 Sickness and Death: Social History and Public Health in Australia 8cp****Spring** Wollongong On Campus**Contact Hours:** Spring 1hr lecture, 2hr seminar per week**Prerequisites:** (14cp of HIST with 8cp HIST at 200 level) or (AUST 101 with 8cp AUST at 200 level) or (14cp of POL with 8cp POL at 200 level) or (14cp of ARTS) or (6cp of ARTS plus 8cp at 200 level)**Assessment:** Research project (30%), Historiography review essay and tutorial presentation (25%), Examination (20%), Analysis of primary document project (15%), Participation (10%)

Subject Description: Examines the history of the identification of and responses to sickness, death and disease in colonial and post-colonial Australia. It will use case studies to investigate the historical roles of doctors, nurses and other health professionals and the history of public health agencies in Commonwealth and State governments. The case studies will also examine the history of the health of indigenous Australians and ethnic minorities and public health concerns arising from urban growth, immigration and industry. In the case studies, a particular emphasis will be placed on the use of primary documents such as parliamentary papers, archival manuscripts, films, photographs and oral histories.

HIST379 Culture and Identity in Indonesian History, 1870-2002 8cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hr tutorial per week

Pre-requisites: (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level)

Assessment: One essay of 1,500 words (30%); One essay of 2,500 words (40%); One tutorial exercise (20%); tutorial participation (10%)

Subject Description: Examines Indonesian experience and perceptions of the modern age. Using novels, autobiographies, films and other texts the subject examines the roles of Javanese and other cultures in Indonesian nationalism, Dutch colonialism, the Revolution, the politics of culture in post-Revolution Indonesia, the rise of the military and the role of Socialism. Particular attention is paid to the ideology of development in Suharto's Indonesia, using tourism in Bali as a case study.

HIST380 Twentieth Century Australian Literary Culture 8cp

Spring Wollongong Flexible

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega/ Moss Vale Flexible

Contact Hours: Spring 1x3hr seminar every third week +online interaction.

Prerequisites: (14 cp of HIST with 8 cp at 200-level) or (AUST101 with 8cp of HIST at 200-level) or (AUST101 and POL230) or (POL230 and 8 cp of HIST at 200-level) or (6 cp of ARTS plus 8cp at 200 level)

Assessment: Bulletin Board Postings (1,000 words) 15%; essay 1 (1,500-2,000 words) 35%; essay 2 (1,500-2,000 words) 35%; participation 15%

Subject Description: This subject examines twentieth-century Australian literary culture in the context of contemporary critical theories of gender, "race" and class. Amongst other things, it examines the representation and critique of gender roles, the process by which national literary canons and national identity are constructed, and the manner in which imperialist ideology played a critical role in the representation of Aboriginal people and Aboriginality in the literature of the period.

HIST401 History IV (Honours) 48cp

Annual Wollongong On Campus

Contact Hours: 2 hours seminar per week.

Pre-requisites: 52 cp in a History Major at an average of no less than 70% (including HIST325 Theory and Method at 70% or better)

Assessment: Research thesis 60%; 2 - 3 essays 40%;

Subject Description: Requirements: (1) Research thesis of 15,000-20,000 words, based on student's own supervised research and making a modest contribution to historical knowledge; (2) Two to three major essays totalling 11,000 - 12,000 words based on the seminar series (3) Regular attendance at weekly honours seminars (two sessions); (4) A work in progress report to be delivered to the seminar group

HIST430 Joint Honours in History and another Discipline 48cp

Annual Wollongong On Campus

Contact Hours: 2 hours seminar per week.

Pre-requisites: 52 credit points in a History major at an average of no less than 70% (including HIST325 Theory and Method at 70% or better).

Assessment: Established on a case by case basis

Subject Description: Students are advised to contact the Program well before the session in which they intend to begin their Honours year so that precise subject requirements can be arranged with the other Program.

ITAL110 Italy and the Italians: The Essentials 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture/seminar.

Exclusions: EURO110

Assessment: two essay outlines 40%, one essay 30%, short quizzes 10%, final test 10%, tutorial performance 10%

Subject Description: This subject aims to introduce students to specific geographical, historical, cultural forces and social frameworks which contributed to shape modern Italy and its people. It seeks to provide essential information which forms a very basic part of every Italian speaker's consciousness by focussing on some of the elements of Italian culture which every Italian person possesses after finishing the minimum required education. The rationale behind such a subject is that such knowledge is assumed by every writer, journalist, film maker and students need to know that context in order to understand the linguistic and cultural aspects of Italy studied in their other subjects.

ITAL151 Italian IA Language 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours tutorial/practical per week.

Exclusions: LANG153 or ITAL103

Assessment: Written tests 40%, workbook 15%, language laboratory assignments 15%, oral test 20%, participation 10%

Subject Description: This is a semi-intensive language course for beginners or near-beginners in Italian and presupposes no prior study of the language. The approach is a functional-notional one which places major emphasis on the communicative functions of language. Revision and maintenance of core grammar are achieved through computer-aided language learning exercises. Oral and written skills are developed through a combination of classroom activities, language laboratory exercises and assignments. Up to date cultural information is also given.

ITAL152 Italian IB Language 6cp**Spring** Wollongong On Campus**Contact Hours:** 6 hours tutorial/practical per week.**Pre-requisites:** ITAL151**Assessment:** Written tests 40%, workbook 15%, language laboratory assignments 15%, oral test 20%, participation 10%**Subject Description:** The program begun in ITAL151 is sustained and developed. Revision and maintenance of core grammar are achieved through a programme of computer-aided language learning exercises. Oral and written skills are developed through a combination of classroom activities, language laboratory exercises and assignments. Oral and written assessments are continuous throughout the session. Successful completion of ITAL152 qualifies students for entry into ITAL251 and ITAL210.**ITAL251 Italian IIA Language and Literature 8cp****Autumn** Wollongong On Campus**Contact Hours:** 4 hours tutorial/practical per week.**Pre-requisites:** ITAL152**Assessment:** Written tests 30% Conversation 15% Oral presentation 15% Other assignments 15% Language laboratory assignments 15% Participation 10%**Subject Description:** The emphasis is on the further development of all the communicative skills in standard Italian. Major attention is given to more complex language structures and their use. Fluency for direct oral communication is further strengthened through a laboratory tape program and small group conversation practicals. The various communicative skills are developed by the use of carefully programmed**ITAL252 Italian IIB Language and Literature 8cp****Spring** Wollongong On Campus**Contact Hours:** 4 hours tutorial/practical per week.**Pre-requisites:** ITAL251**Assessment:** Written tests 30% Conversation 15% Oral presentation 15% Other assignments 15% Language laboratory assignments 15% Participation 10%**Subject Description:** The program began in ITAL251 is continued.**ITAL351 Italian IIIA Language and Literature 8cp****Autumn** Wollongong On Campus**Contact Hours:** 3 hours tutorial/practical per week.**Pre-requisites:** ITAL252**Assessment:** Written tests 30% Oral test 20% Assignments (Lab. Manual and tapes) 20% Oral presentations 20% Participation 10%**Subject Description:** This is an advanced subject in Italian language and stylistics. Fine points of advanced grammar, linguistic structure and stylistic use are studied. Reading comprehension, translation, text analysis and written expression are further developed by the use of graded selections taken from the contemporary printed media and from contemporary works of Italian literature.**ITAL352 Italian IIID Language and Literature 8cp****Spring** Wollongong On Campus**Contact Hours:** 3 hours tutorial/practical per week.**Pre-requisites:** ITAL351**Assessment:** Written tests 30% Oral test 20% Assignments (Lab. Manual and tapes) 20% Oral presentations 20% Participation 10%**Subject Description:** The program begun in ITAL351 is continued.**ITAL362 Interpreting II 8cp****Spring** Wollongong On Campus**Contact Hours:** 5 hours lecture/practical per week.**Pre-requisites:** ITAL361**Assessment:** Final Test 30% Translation assignments 25% Language laboratory assignments 10% Feedback assignments 10% Essay 10% Participation 10%**Subject Description:** The course begun in ITAL361 is continued and expanded**ITAL391 Italian Study Abroad A 8cp****Autumn/ Spring** Italy On Campus**Contact Hours:** as required.**Assessment:** to be advised by host university**Subject Description:** Students taking this subject will undertake an approved course of study at an Italian University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date.**ITAL392 Italian Study Abroad B 8cp****Autumn/ Spring** Italy On Campus**Contact Hours:** as required.**Assessment:** to be determined by host University**Subject Description:** Students taking this subject will undertake an approved course of study at an Italian University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be obtained at least six months prior to the proposed departure date.**ITAL393 Italian Study Abroad C 8cp****Autumn/ Spring** Italy On Campus**Summer 2004/05** Italy On Campus**Contact Hours:** as required.**Assessment:** to be determined by host university**Subject Description:** Students taking this subject will undertake an approved course of study at an Italian University deemed equivalent to an 8 credit point 300 level subject at the University of Wollongong. This subject will be taken under the supervision of a member of staff and a detailed subject outline will be provided. Permission to undertake this subject must be

obtained at least six months prior to the proposed departure date.

ITAL450 Italian IV Honours 48cp

Annual Wollongong On Campus

Assessment: Dissertation 50%. Essays/ oral presentation 50%

Subject Description: To be awarded a BA(Hons) in Italian students must: (1) write a 15000 word dissertation based on the student's own supervised research on a topic in Italian studies to be approved by the Italian Honours Coordinator. The dissertation will be assessed by one internal and one external examiner; (2) write two to three major essays totalling 11000-12000 words focusing on designated theoretical issues, current academic debate, or methodological processes; (3) deliver an oral presentation of the research proposal; (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled. At least one of the written assessment items must be in Italian and at least one in English, the mix to be determined by the Italian Honours Coordinator. The oral presentation may be delivered in either Italian or English.

JAPA102 Japanese Studies for Educational Purposes 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lecture/practical per week.

Exclusions: (JAPA101) or (JAPA103)

Assessment: Language tests 45%, assignments 45%, participation 10%

Subject Description: This subject is not part of the Japanese major, but is being offered as an elective subject in the Bachelor of Education (Primary). It is designed for students with no prior knowledge of the Japanese language. It will introduce the syllabaries of Japanese, Hiragana and Katakana and survival language functions relevant to educational contexts. It will also survey current issues in Japanese education. It is divided into language seminars and Japanese studies lectures.

JAPA103 Japanese Studies for Business Purposes 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lecture/practical per week.

Exclusions: (JAPA101) or (JAPA102)

Assessment: Language tests 60%, Assignments 30%, Participation 10%

Subject Description: This subject is not part of the Japanese major, but is being offered as an elective subject in the Bachelor of Commerce. It is designed for students with no prior knowledge of the Japanese language. It will introduce the syllabaries of Japanese, Hiragana and Katakana and survival language functions relevant to commerce contexts. It will also survey current issues in Japanese business. It is divided into language seminars and Japanese studies lectures.

JAPA110 Japan and the Japanese 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture, 1 hour practical per week.

Assessment: Continuous assessment 90%; participation 10%

Subject Description: This course familiarises students with Japan and some of the main issues that have influenced the

formation of modern Japan. The approach in this subject is chronological, but will cover themes ranging from public to private spheres, from regional to national to international spheres, focussing on political developments as well as social and cultural aspects of Japan's transformation in the past two centuries. Students will also be asked to consider some theoretical and abstract concepts such as Orientalism, Imperialism or the construction of national myths for example. These are concepts that will also be useful in other subjects across faculty.

JAPA141 Beginners' Japanese I 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours lect/prac per week.

Exclusions: JAPA151

Assessment: Continuous assessment 90%; participation 10%

Subject Description: Introduces the basics of Japanese language covering the pronunciation and the writing of the hiragana and katakana syllabaries and Chinese characters, as well as basic Japanese sentence construction. A situational approach will be used, with each lesson presenting students with increasingly complex situations.

JAPA142 Beginners' Japanese II 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours lecture/practical per week.

Pre-requisites: (JAPA151) or (JAPA141)

Exclusions: JAPA152

Assessment: Continuous assessment 90%; participation 10%.

Subject Description: The program begun in JAPA151/JAPA141 is continued and expanded.

JAPA161 Post HSC Japanese I 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: (Pass in 2Unit/3Unit HSC equivalent).

Assessment: Continuous assessment 90%, participation 10%

Subject Description: Development of skills in speaking, listening to, reading and writing Japanese. Study of social context and aesthetic use of the language. Development of language study skills, computer skills and understanding of language in general.

JAPA162 Post HSC Japanese II 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: JAPA161

Assessment: Continuous assessment 90%, participation 10%

Subject Description: The program for JAPA161 is expanded and developed.

JAPA261 Intermediate Japanese I 8cp

Autumn Wollongong On Campus

Contact Hours: 5 hours lecture/practical per week.

Pre-requisites: (JAPA153) or (JAPA143) or (JAPA162) or (JAPA154)

Assessment: Continuous assessment 90%; participation 10%

Subject Description: The program begun in JAPA141/151/161 is continued and expanded.

JAPA262 Intermediate Japanese II 8cp

Spring Wollongong On Campus

Contact Hours: 6 hours Lecture /practical per week

Assessment: Continuous assessment 90%; participation 10%

Subject Description: The program begun in JAPA141/151/161 is continued and expanded.

JAPA264 Japanese IIC Language (Wollongong) 8cp

Winter Wollongong On Campus

Contact Hours: Winter Supervision for set work.

Pre-requisites: (JAPA261)

Exclusions: JAPA271

Assessment: tests 50%, assignments 50%

Subject Description: In the event that students are unable to do JAPA271 In-Country Japanese Session due to serious illness or visa problems, they will, at the discretion of the Convenor of Program, be permitted to take this subject in place of JAPA271. This subject is offered at the University of Wollongong.

JAPA271 In-country Japanese session 8cp

Winter Kawasaki International Centre On Campus

Contact Hours: 20-25 hours per week for 3 weeks.

Pre-requisites: (JAPA261)

Exclusions: JAPA264

Assessment: Diary and critique Japanese society (log book); Speech presentation; Task and activities relating to everyday life in Japan.

Subject Description: In-country Japanese session requires the students to live with a Japanese host family in Kawasaki (Wollongong's sister city) and attend all lectures / seminars / excursions that are arranged to enhance both language and cultural understanding. Excursions include visits to schools and seminars include cultural experiences such as kimono and tea ceremony. Assessments include public speaking in Japanese. The aims are to: Develop performance in speaking and understanding Japanese; develop reading and writing skills with an emphasis on functional literacy; experience basic research in Japan; to experience living with a Japanese family; develop understanding of and capacity to operate and communicate in Japan's cultural environment; and develop understanding of culture in general.

JAPA310 Japanese Economics and Media 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours lecture/seminar per week.

Pre-requisites: (JAPA262)

Assessment: Assignments and tests 90%; classwork 10%

Subject Description: This subject will introduce students to the study of the language of Japanese economics, and media using Japanese and English language materials.

JAPA361 Advanced Japanese I 8cp

Autumn Wollongong On Campus

Contact Hours: 5 hours lecture/practical per week.

Pre-requisites: (JAPA262)

Assessment: Assignments & tests 90%; classwork 10%

Subject Description: This subject will further develop students' skills in speaking, listening to, reading and writing Japanese. The language will be studied in its social context. Computer skills and understanding of language in general will be developed further.

JAPA362 Advanced Japanese II 8cp

Spring Wollongong On Campus

Contact Hours: 5 hours lecture/practical per week.

Pre-requisites: (JAPA361)

Co-requisites: JAPA310

Assessment: Assignments & tests 90%; classwork 10%

Subject Description: This subject will further develop students' skills in speaking, listening to, reading and writing Japanese. The language will be studied in its social context. Computer skills and understanding of language in general will be developed further.

JAPA450 Japanese IV Honours 48cp

Annual Wollongong On Campus

Pre-requisites: (JAPA310 & JAPA362)

Assessment: Dissertation 50%. Essays and oral presentation 50%

Subject Description: To be awarded a BA(Hons) in Japanese students must: (1) write a 15000 word dissertation based on the student's own supervised research on a topic in Japanese studies to be approved by the Japanese Honours Coordinator. The dissertation will be assessed by one internal and one external examiner; (2) write two to three major essays totalling 11000-12000 words focusing on designated theoretical issues, current academic debate, or methodological processes; (3) deliver an oral presentation of the research proposal; (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled. At least one of the written assessment items must be in Japanese and at least one in English, the mix to be determined by the Japanese Honours Coordinator. The oral presentation may be delivered in either Japanese or English

JAPA550 Japanese Studies Abroad 48cp

Annual Wollongong On Campus

Contact Hours: As required.

Pre-requisites: A university degree

Assessment: Continuous assessment 50%; exit assessment 50%

Subject Description: This course involves the study for one full academic year at a Japanese University. Students who have no knowledge of the Japanese language will enter an elementary language. Those students with Japanese language skills will be placed into the host university's programme. In order to pass the subject, a 'pass' must be obtained in the final exit test (at the level appropriate to the student's entry point) upon return to Wollongong. Students successfully completing this subject will be awarded the Graduate Diploma of Arts (Japanese).

LANG305 Literature and Society in Renaissance Europe 8cp**Autumn** Wollongong On Campus**Contact Hours:** 1 hour lecture, 2 hours seminar per week.**Pre-requisites:** 24 credit points**Assessment:** two essays, two quizzes, tutorial participation

Subject Description: The Renaissance constitutes a crucial period in Western civilisation. It saw a re-orientation of the arts and sciences which deeply influenced the course of European, and indeed world history. The subject will begin by examining the works of Dante Alighieri and will proceed to stress the contradictory nature of the Renaissance, concentrating on Italy and France. It will examine the literature (with works by Boccaccio, Petrarch, Machiavelli, Vasari, Rabelais, Montaigne, Ronsard, Du Bellay), art, and learning of the period, while exploring underlying social and political tensions.

LANG371 Advanced Studies in Language/ Culture A 8cp**Autumn/ Spring** Wollongong On Campus**Contact Hours:** 1hour seminar, 2 hours supervised work per week.**Assessment:** set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff in the student's chosen area of specialisation in the Modern Languages Program. This subject provides an opportunity for upper level students in French, Italian, Japanese or English Language Studies to pursue a program of advanced work in approved areas of linguistic or cultural studies in the relevant language. For details of availability of topics offered, students should consult the Coordinator of their language strand. Entry to this subject is at the discretion of the Head of Program.

LANG372 Advanced Studies in Language/ Culture B 8cp**Autumn/ Spring** Wollongong On Campus**Contact Hours:** 1 hr seminar, 2 hrs supervised work per week.**Assessment:** set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff in the student's chosen area of specialisation in the Modern Languages Program. It subject provides an opportunity for upper level students in French, Italian, Japanese or English Language Studies to pursue a program of advanced work in approved areas of linguistic or cultural studies in the relevant language. For details of availability of topics offered, students should consult the Coordinator of their language strand. Entry to this subject is at the discretion of the Head of Program.

LANG373 Advanced Studies in Language/ Culture C 8cp**Autumn/ Spring** Wollongong On Campus**Contact Hours:** 1 hr seminar and 2hrs supervised work pw.**Assessment:** Set out in Subject Outline

Subject Description: This is a reading course offered under the direct supervision of a member of staff in the student's chosen area of specialisation in the Modern Languages Program. This subject provides an opportunity for upper level students in French, Italian, Japanese or English Language Studies to pursue a program of advanced work in approved areas of linguistic or cultural studies in the relevant language. For details

of availability of topics offered, students should consult the Coordinator of their language strand. Entry to this subject is at the discretion of the Head of Program.

LANG425 Combined French and Italian Honours 48cp**Annual** Wollongong On Campus**Assessment:** Dissertation 50%. Essays/ oral presentation 50%

Subject Description: To be awarded a BA(Hons) in French and Italian students must: (1) write a 15000 word dissertation based on the student's own supervised research on a topic in French or Italian studies to be approved by the French and Italian Honours Coordinators. The dissertation will be assessed by one internal and one external examiner; (2) write two to three major essays totalling 11000-12000 words focusing on designated theoretical issues, current academic debate, and methodological processes; (3) deliver an oral presentation on the research proposal; (4) attend and participate in seminars, meetings, workshops and skills development activities as scheduled. At least one of the written assessment items must be in French and at least one in Italian, the mix to be determined by the Honours Coordinators. The oral presentation may be delivered in French, Italian or English.

LING210 Communicating in a Foreign Language 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours lecture/practical per week.**Exclusions:** Not to count with LANG210**Assessment:** Tests, assignments, team work

Subject Description: This subject aims to provide language students with a better understanding of the process of second language acquisition (SLA) and of bilingualism. We focus on the linguistic, socio-cultural and personal factors which affect SLA and discuss bilingualism as an individual and a societal phenomenon. This subject is compulsory for students majoring in a language or in ELL.

PHIL101 Knowledge, World and Values A 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour lecture, 1 hour tutorial per week.**Exclusions:** (PHIL201) or (PHIL103) or (PHIL203)**Assessment:** Essay (40%); examination (40%); tutorial (20%)

Subject Description: Exploration of: 1. scepticism and theories of justification of belief 2. theories of the self and its identity through time 3. issues relating to realism and idealism 4. the nature of moral values; cultural relativism; the subjectivity/objectivity of values; self-interest and morality 5. the justification of political institutions; rights and authority; the obligation to obey the state; equality and justice; law and morality. 6. Introduction to philosophical skills and approach.

PHIL102 Body, Mind and Persons A 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour lecture, 1 hour tutorial per week.**Exclusions:** (PHIL202) or (PHIL103) or (PHIL203)**Assessment:** Essay (40%); examination (40%); tutorial (20%)

Subject Description: Body, Mind and Persons is an introduction to some central philosophical issues concerning persons and their place in the world. Topics covered are from

Subject Descriptions

the following major areas: Mind and Body We begin by asking why philosophers have been concerned with the status of the mind. This section then offers a critical examination of some philosopher s accounts of the nature of the human mind and the relationship between our minds and our bodies. Matters of the Self, Life and Death This section explores a range of issues relating to the value of our lives as persons. We ask such questions as: can anyone knowingly and willingly do wrong? what is the relationship between living the good life and living the moral life? what consequences does determinism have for the way re regard and react to others? what is evilness/goodness or beauty/ugliness of character or soul? what is the relation between our sexuality and our personhood? can we make a principled distinction between good and bad sex? is our death something bad for us? These questions will relate to issues which have come up elsewhere in the subject.

PHIL106 Media, Ethics and Law 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture; 1hour seminar per week.

Assessment: tutorial Paper 10%; tutorial Participation 10%; Essay 40%; Exam 40%

Subject Description: This subject critically examines the ethical and legal contexts of media and media practice. Students will consider the tensions among ethical judgements, professional codes of ethical practice and legal regulation for workers in media industries. An example might be where a journalist s obligation to respect confidentiality might clash with a legal obligation not to withhold evidence about a crime. Issues examined in this subject may include: Privacy, pornography, defamation, bias, questions of cultural and gender diversity; censorship and self-censorship.

PHIL112 Logic A 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour practical per week.

Exclusions: (PHIL153) or (PHIL216) or (PHIL253) or (MATH223)

Assessment: Class tests (40%); examination (60%)

Subject Description: An introduction to formal logic covering (i) the representation of arguments in English in the symbolic languages of propositional logic and predicate logic; (ii) the use of tables as a method of testing for validity within propositional logic; and (iii) formal proof as a method of establishing validity within both propositional logic and predicate logic.

PHIL151 Practical Reasoning A 6cp

Autumn Wollongong Flexible

Autumn Shoalhaven Flexible

Autumn Batemans Bay Flexible

Autumn Bega/ Moss Vale Flexible

Contact Hours: Wollongong: 2 hour lecture, 1 hour practical per week, Other Campuses: 2 hour seminar per week.

Exclusions: (PHIL153) or (PHIL253) or (PHIL214)

Assessment: Class tests (40%); examination (60%)

Subject Description: An introduction to the informal study of reasoning designed to improve the ability to organise and analyse bodies of information clearly, systematically and critically regardless of the student's area of specialisation. Topics include inductive and deductive reasoning; distinguishing good from bad arguments; meaning and definition; common

fallacies and dirty debating tricks; complex problem solving and scientific method.

PHIL201 Knowledge, World and Values B 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour tutorial per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL101) or (PHIL103) or (PHIL203)

Assessment: Essay (40%); examination (40%); tutorial (20%)

Subject Description: Exploration of: 1.scepticism and theories of justification of belief 2.theories of the self and its identity through time 3. issues relating to realism and idealism 4. the nature of moral values; cultural relativism; the subjectivity/objectivity of values; self-interest and morality 5. the justification of political institutions; rights and authority; the obligation to obey the state; equality and justice; law and morality. 6. Introduction to philosophical skills and approach.

PHIL202 Body, Mind and Persons B 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour tutorial per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Exclusions: (PHIL102) or (PHIL103) or (PHIL203)

Assessment: Essay (40%); examination (40%); tutorial (20%)

Subject Description: Body, Mind and Persons is an introduction to some central philosophical issues concerning persons and their place in the world. Topics covered are from the following major areas: Mind and Body We begin by asking why philosophers have been concerned with the status of the mind. This section then offers a critical examination of some philosopher s accounts of the nature of the human mind and the relationship between our minds and our bodies. Matters of the Self, Life and Death This section explores a range of issues relating to the value of our lives as persons. We ask such questions as: can anyone knowingly and willingly do wrong? what is the relationship between living the good life and living the moral life? what consequences does determinism have for the way re regard and react to others? what is evilness/goodness or beauty/ugliness of character or soul? what is the relation between our sexuality and our personhood? can we make a principled distinction between good and bad sex? is our death something bad for us? These questions will relate to issues which have come up elsewhere in the subject.

PHIL206 Practical Ethics 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lecture/seminar per week.

Pre-requisites: At least 18 cp, not necessarily in Philosophy

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: A systematic study of a range of ethical problems facing contemporary western society. A major objective of this subject will be to identify the theoretical assumptions behind particular moral viewpoints. Topics will include a selection of the following: privacy; pornography and censorship; prejudice and discrimination; capital punishment; sexual ethics; sexual harassment; rape; war; abortion; infanticide; suicide; genetic engineering.

PHIL214 Practical Reasoning B 8cp**Autumn** Wollongong On Campus**Autumn** Shoalhaven Flexible**Autumn** Batemans Bay Flexible**Autumn** Bega/ Moss Vale Flexible**Contact Hours:** On Campus: 2 hour lecture, 1 hour practical per week, Flexible: 2 hour seminar per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** (PHIL151) or (PHIL153) or (PHIL253)**Assessment:** Class tests (40%); examination (60%)

Subject Description: An introduction to the informal study of reasoning designed to improve the ability to organise and analyse bodies of information clearly, systematically and critically regardless of the student's area of specialisation. Topics include inductive and deductive reasoning; distinguishing good from bad arguments; meaning and definition; common fallacies and dirty debating tricks; complex problem solving and scientific method.

PHIL216 Logic B 8cp**Spring** Wollongong On Campus**Contact Hours:** Spring 2 hour lecture, 1 hour practical per week, Summer 2003/2004 4 hour lecture; 2hour practical per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** (PHIL112) or (PHIL153) or (PHIL253) or (MATH223)**Assessment:** Class tests (40%); examination (60%)

Subject Description: An introduction to formal logic covering (i) the representation of arguments in English in the symbolic languages of propositional logic and predicate logic; (ii) the use of tables as a method of testing for validity within propositional logic; and (iii) formal proof as a method of establishing validity within both propositional logic and predicate logic.

PHIL232 Political Philosophy A 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours lecture; 1 hour tutorial per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** (PHIL332) or (PHIL257) or (PHIL357) or (POL214) or (POL314) or (PHIL383)**Assessment:** Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Examines classical conservative, liberal, and radical political theorists, such as Plato, Aristotle, Hobbes, Locke, Bentham, Rousseau, Wolstonecraft and Marx. Topics discussed include: the nature of the state; political obligation and authority; liberty, equality and justice; democracy; human rights and human nature; morality and politics; alienation, oppression and revolution.

PHIL255 Interpretation and Communication 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours lecture; 1 hour tutorial per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Assessment:** Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: In this subject we examine issues in the philosophy of language, with emphasis on theories of interpretation and communication. The subject considers both analytic and contemporary european traditions, with the focus varying from year to year. Issues considered include: 1. theories of meaning, and meaning scepticism (what is meaning?, is it determinate? ..); 2. radical interpretation; 3. arguments regarding indeterminacy of interpretation or translation; 4. speech act theory and theories of communication; 5. the nature of literary meaning; 6. the concepts of 'author', 'text', and 'work'; 7. the significance of metaphor and other tropes. There will be special emphasis on close readings of central texts.

PHIL256 Ethics and the Environment A 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour lecture, 1 hour tutorial per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** PHIL258**Assessment:** Essay (30%); tutorial (20%); examination (50%)

Subject Description: A study of evaluative issues concerning the environment. Provides a grounding in debates about, for example, our obligations to non-human animals; whether wilderness areas have value independently of their value to humans; the problem of overpopulation and the question of our obligations to the 3rd world and to future generations; the value of biodiversity. This subject can also be taken as an 8 credit point subject, PHIL258, which shares lectures and tutorials, but has different assessment, reflecting the extra 2 credit points.

PHIL258 Ethics and the Environment B 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour lecture, 1 hour tutorial per week.**Pre-requisites:** At least 18 credit points, not necessarily in Philosophy**Exclusions:** (PHIL256)**Assessment:** Essay (40%); exam (40%); seminar (20%)

Subject Description: A study of evaluative issues concerning the environment. Provides a grounding in debates about, for example, our obligation to non-human animals; whether wilderness areas have value independently of their value to humans; the problem of overpopulation and the question of our obligation to the 3rd world and to future generations; the value of biodiversity. This subject shares lectures and tutorials with the 6 credit point subject, PHIL256, but has different assessment, reflecting the extra 2 credit points.

PHIL260 Philosophy of Feminism A 8cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hour lecture/seminar per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** PHIL363**Assessment:** Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Introduction to feminist philosophy, examining the relationships between feminism and philosophy. Explores analytical and ethical issues which arise in feminist philosophy and the ways these issues divide feminists, through exploration of concepts such as: sex and gender difference, equality, justice, oppression, affect, exploitation and human nature as they occur in feminist theories.

PHIL262 Theories of Knowledge and Metaphysics A 8cp**Spring** Wollongong On Campus**Contact Hours:** 3 hour lecture/seminar per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** PHIL322**Assessment:** Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: An examination of attempts to answer the central questions in the theory of knowledge and of the metaphysical implications of those attempts. The questions addressed include: What is knowledge?; Is knowledge possible? (the challenge of scepticism); Is knowledge different from information?; Is a normative epistemology possible or desirable? We will discuss, eg debates over internalism and externalism, realism and anti-realism, descriptive and revisionary metaphysics.

PHIL270 Philosophy of Law 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour seminar per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** LLB312**Assessment:** Essay on approaches to legal theory 40%; Research essay on issue in legal philosophy 60%

Subject Description: Introduction to philosophical issues in law. Topics will include a selection of the following: morality and the law; the harm principle; legal paternalism; rights and obligations; conscience and the law; the justification of punishment; conceptual and moral problems in legal decision-making (e.g. "wrongful life" cases, and arguments for a legal duty of active aid).

PHIL271 Special Philosophical Questions A 8cp**Autumn/ Spring** Wollongong On Campus**Summer 2004/05** Wollongong On Campus**Contact Hours:** 3 hour lecture/discussion per week.**Pre-requisites:** Approval of Convenor of Program**Co-requisites:**

Restrictions: Enrolment in this subject is restricted. Students may not enrol over the web. Please refer to the Convenor of Program for more information.

Assessment: Essays 100% (or an equivalent approved combination of essay(s) and exam(s) and seminar)

Subject Description: A detailed, supervised investigation of an approved philosophical topic, author, period, or school of thought.

PHIL284 Ethics A 8cp**Spring** Wollongong On Campus**Contact Hours:** 3 hour lecture/seminar per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** (PHIL301)**Assessment:** Essay 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: A critical study of fundamental issues in moral philosophy. Among the topics discussed will be a selection of the following: Moral relativism; subjectivist and objectivist theories of morality; facts and values; moral realism;

consequentialism; moral motivation; egoism and altruism; morality and rationality.

PHIL286 Philosophy of Social Science 8cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hour lecture/seminar per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Assessment:** Essay 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: A critical survey of contemporary philosophical theories about the nature of social science. Examines the naturalistic, interpretive, critical and postmodernist schools. This survey is animated by sceptical concerns regarding the very possibility of a social science, and of even the possibility of determinately interpreting each other. An underlying thematic focus will be the question of intercultural understanding, the significance of cultural relativism, and the possibility of multiculturalism.

PHIL288 Philosophy of Mind and Action A 8cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hour lecture/seminar per week.**Pre-requisites:** At least 18 cp, not necessarily in Philosophy**Exclusions:** PHIL351**Assessment:** Essay 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: Examines contemporary issues in one or more of the following areas: metaphysics of mind (dualism, mind-body identity, functionalism, etc.); theories of intention and agency; explanations of irrationality (such as divided mind accounts of self-deception and weakness of will); theories of emotion (its nature, epistemology and role in moral psychology); self-knowledge and first-person authority.

PHIL301 Ethics B 8cp**Spring** Wollongong On Campus**Contact Hours:** 3 hour lecture/seminar per week.**Pre-requisites:** (At least 16 cp in PHIL at 200-level or 300-level)**Exclusions:** (PHIL251) or (PHIL284)**Assessment:** Essays 80% (or essay 40% and exam 40%)

Subject Description: A critical study at an advanced level of fundamental issues in moral philosophy. Among the topics discussed will be a selection of the following: Moral relativism; subjectivist and objectivist theories of morality; facts and values; moral realism; consequentialism; moral motivation; egoism and altruism; morality and rationality.

PHIL305 Special Philosophical Questions B 8cp**Autumn/ Spring** Wollongong On Campus**Summer 2004/05** Wollongong On Campus**Contact Hours:** 3 hour lecture/discussion per week.**Pre-requisites:** Approval of Convenor of Program

Restrictions: Enrolment in this subject is restricted. Students may not enrol over the web. Please refer to the Convenor of Program for more information.

Assessment: Essays 100% (or an equivalent approved combination of essay(s) and exam(s) and seminar)

Subject Description: A detailed, supervised investigation at an advanced level of an approved philosophical topic, author, period, or school of thought.

PHIL322 Theories of Knowledge and Metaphysics B 8cp

Spring Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: (At least 16 cp in PHIL at 200-level or 300-level)

Exclusions: (PHIL262)

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: An examination of attempts to answer the central questions in the theory of knowledge and of the metaphysical implications of those attempts. The question addressed include: what is knowledge?; is knowledge possible? (the challenge of scepticism); is knowledge different from information?; is a normative epistemology possible or desirable?. We will discuss, eg debates over internalism and externalism, realism and anti-realism, descriptive and revisionary metaphysics.

PHIL351 Philosophy of Mind and Action B 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: (At least 16 cp in PHIL at 200-level or 300-level)

Exclusions: (PHIL288)

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: Examines contemporary issues in one or more of the following areas: metaphysics of mind (dualism, mind-body identity, functionalism, etc.); theories of intention and agency; explanations of irrationality (such as divided mind accounts of self-deception and weakness of will); theories of emotion (its nature, epistemology and role in moral psychology); self-knowledge and first-person authority.

PHIL363 Philosophy of Feminism B 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hour lecture/seminar per week.

Pre-requisites: (At least 16 credit points in Philosophy at 200-level or 300-level)

Exclusions: (PHIL260)

Assessment: Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Introduction to feminist philosophy, examining the relationships between feminism and philosophy. Explores analytical and ethical issues which arise in feminist philosophy and the ways these issues divide feminists, through exploration of concepts such as: sex and gender difference, equality, justice, oppression, affect, exploitation and human nature as they occur in feminist theories.

PHIL370 Topics in Philosophy of Law 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lecture/seminar per week.

Pre-requisites: (At least 8 cp in Philosophy at 200-level or 300-level)

Assessment: Essays 80% (or essay 40% and exam 40%); seminar 20%

Subject Description: Advanced study of central issues in the philosophy of law. Topics will include a selection of the following: the nature and justification of law; agent responsibility: action, intention, will, negligence; collective responsibility; moral and legal evaluation; justification and excuse; the justification of criminal defences, e.g. provocation, necessity, duress, self-defence, insanity.

PHIL380 Bioethics 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture, 1 hour tutorial per week.

Pre-requisites: (At least 16 cp at 200-level or 300-level)

Exclusions: (PHIL365)

Assessment: Research essay on bioethical topic 40%; Research essay on bioethical topic 40%; seminar presentation and participation 20%

Subject Description: Philosophical examination of a range of bioethical problems. Topics will include: euthanasia and physician-assisted suicide; reproduction technology (e.g. IVF, cloning); anonymous donor programs; genetic counselling, screening and testing; surrogacy; allocation of health resources; organ transplantation; embryo and fetal research; experimentation involving human subjects; research involving animals; the role of ethics committees; the nature of professional ethics.

PHIL383 Political Philosophy B 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture; 1hour tutorial per week.

Pre-requisites: (At least 16 cp of Philosophy at 200-level or 300-level)

Exclusions: (PHIL232)

Assessment: Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Examines classical conservative, liberal, and radical political theorists, such as Plato, Aristotle, Hobbes, Locke, Bentham, Rousseau, Wolstonecraft and Marx. Topics discussed include: the nature of the state; obligation and authority; liberty, equality and justice; democracy; human rights and human nature; morality and politics; alienation, oppression and revolution.

PHIL390 Contemporary Political Philosophy 8cp

Autumn Wollongong On Campus

Contact Hours: 2hours lecture; 1hour tutorial per week.

Pre-requisites: (At least 16 cp in PHIL at 200-level at 300-level).

Assessment: Critical Annotated Bibliography 40%; Research Essay 40%; seminar presentation and participation 20%

Subject Description: Examination of current themes in political philosophy. Explores differences in the role of the state, civil society and citizenship in recent liberal, communitarian and feminist political theory. In particular, examines the ways in which contemporary political philosophers respond to gender differences and ethnic diversity in their political theories.

PHIL403 Philosophy Honours 48cp**Annual** Wollongong On Campus**Contact Hours:** Normally, 4 hours contact per week.**Pre-requisites:** Entry to the Honours year or Honours subjects shall be determined on the advice of the Head of Program**Assessment:** Thesis (50%); 3 Electives (50%)**Subject Description:** Students do three electives (5,000-6,000 word essays required for each elective) which is worth 50%, and one thesis (approximately 12,000 words) also worth 50%. All assessable work for the electives is double marked. Thesis has one internal and one external marker. Students are expected to participate in the Honours and Postgraduate seminars. Ordinarily students are expected to complete PHIL403 within one year full time equivalent enrolment.**PHIL413 Combined Philosophy Honours 48cp****Annual** Wollongong On Campus**Contact Hours:** 4 hours contact per week.**Pre-requisites:** Entry to combined Honours shall be determined on the advice of the Programs concerned.**Assessment:** Thesis 50%, Electives 50%**Subject Description:** The combined Honours course will consist of a program of study approved by the Head of the Philosophy Program in collaboration with the Head of the other Program concerned. The program will normally be composed of elements offered at 400 level by the two Programs, including a thesis of approximately 12,000 words.**POL 111 Australian Politics 6cp****Autumn** Wollongong On Campus**Contact Hours:** 3 hours lectures & tutorials per week.**Assessment:** Analytical media exercise 20%; essay 40%; examination 30%; tutorial participation 10%**Subject Description:** This subject introduces students to the functions and operations of the basic institutions of politics (the parliament, constitution, cabinet, bureaucracy and High Court) in Australia, some of the ideas (democracy, liberalism, conservatism, social democracy, feminism), that are important in Australian political life, and some of the factors (political parties, gender, the media) that help to shape Australian political life. Students will be expected to understand what these institutions, ideas and practices actually contribute to Australian government and politics and what functions and roles they are supposed to/do perform.**POL 121 Politics in a Globalising World 6cp****Spring** Wollongong On Campus**Contact Hours:** 3 hours lectures & tutorials per week.**Assessment:** tutorial Paper: 20% of final grade; Essay: 30% of final grade; Exam (3hour) 30% of final grade; Journal 20% of final grade**Subject Description:** The subject examines the impact of Globalisation on Australian politics and in international relations generally. Australia's role in the Asia Pacific Region is analysed and the causes of the Asian economic and financial crisis examined. Developments within the Triad of rich countries and key theories of globalisation are critically assessed. Special attention is paid to world poverty, migration, labour relations, race and ethnicity in world politics. The collapse of communism

and the problems of democratic transition are analysed. Finally the implications of globalisation for democracy and social justice are examined.

POL 141 Change and Debate in Contemporary Australian Politics 6cp*Not on offer in 2004***Assessment:** Book Review (30%); seminar Presentation (20%); Class Participation & WebCT postings (20%); Major Essay (30%)**Subject Description:** The subject examines some of the major changes that have occurred in the Australian politics, society, culture and the economy since the election of the Howard government in 1996. This subject will explore these changes through an examination of key debates in Australian public life, and their implications for notions of identity, democracy, citizenship, class and community. Topics covered include the myth of Australia as an egalitarian society, the changing nature of left and right, globalisation, reconciliation and Aboriginal sovereignty, refugees and immigration policy, the role of unionism in Australian politics, and the war on terrorism.**POL 211 Democracy in Theory and Practice 8cp****Spring** Wollongong On Campus**Contact Hours:** 1 hour lecture; 2hour tutorial per week.**Pre-requisites:** (6cp of POL) or (6cp of HIST) or (6cp of PHIL) or (6cp of SOC).**Assessment:** tutorial Paper 20% of Final grade; Essay 2000 words 40% of Final grade; Examination (containing seen and unseen questions) 30% of Final grade; Participation 10% of Final grade**Subject Description:** The subject analyses and contrasts the development of two western traditions: democracy and republicanism. It examines their origins in Ancient Greece and Rome, the rise of different schools of liberalism, participatory and deliberative democracy, conservatism, pluralism, social democracy and European and Leninist Marxism. Contemporary critiques of Western democratic theory from feminist, neo Marxist, neo liberal, conservative, post modern and technocratic/ industrialist scholars are analysed and their suggested alternatives are examined. The subject examines not only the quality and coherence of the ideas expressed by respective thinkers but their practical implications and feasibility.**POL 216 Politics in the USA 8cp****Autumn** Wollongong On Campus**Contact Hours:** 2 hour lecture; 1 hour tutorial per week.**Pre-requisites:** (6cp of POL)**Assessment:** Essay 40%; Journal 30%; Exam 30%**Subject Description:** This subject examines the American political system. It provides an introduction to the institutional context of American politics, focussing upon the structure and function of government, and also deals in depth with major factors and issues which shape politics today. The roles, in theory and practice, of the Constitution, the President, the Congress, the Supreme Court are examined. Political parties, election processes and campaigns are surveyed and analysed. These institutional aspects of American politics raise crucial questions about democracy and power, questions which the subject deals with at length. Other areas of enquiry include the

mass media and political culture generally, federalism and bureaucracy, and racial and class divisions. Attention is also paid to ideology and the making of public policy

POL 224 Politics and the Media 8cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: (6cp of POL) or (6cp of CCS)

Assessment: Essay 40%; tutorial paper 30%; examination 30%
Subject Description: This subject examines the political role and power of the mass media. Particular attention is paid to the manufacture of news, the construction of news frames, the function of agenda-setting, the issue of bias, the use and abuse of media by politicians, the question of ownership and control, the role of advertising. While the major focus is on news reporting and commentary, cultural politics in general (including popular culture) is examined.

POL 225 International Relations: An Introduction 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week lectures and tutorials per week.

Pre-requisites: (6cp of POL).

Assessment: tutorial paper 20%; essay 40%; exam 30%; tutorial participation 10%

Subject Description: Provides an introduction to the study of International Relations. Its focus is on concepts, issues and theories of particular contemporary relevance: Realism, Idealism, feminist perspectives, dependency and interdependence, globalism, etc. Close critical attention is paid to the United Nations, security and other global and regional regimes, international relations in the Asia-Pacific region, including Asia-Pacific co-operation, regional organisations and the world after September 11.

POL 290 Women in Society: Productive and Reproductive Labour 8cp

Spring Wollongong On Campus

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega/ Moss Vale Flexible

Contact Hours: 3 hours per week

Pre-requisites: (6cp of POL) or (12cp at 100-level in any subject/s)

Exclusions: GENE215

Assessment: Book Review and issues paper 1000 words 30%; Group Project on one of the themes comprised of: Group work-in-progress presentation 15%; Individual essay or report (2000 – 2500 words) 35%; Participation in electronic and class discussion 20%

Subject Description: The social changes promoted by the Women's Liberation Movement have contributed to new understandings of the position of women in social, political and economic life in Australia over the past 35 years. The movement built on a history of women's activism. The subject will focus on topics around the themes of the contemporary women's movement in Australia, women and paid work, sexuality, motherhood and issues of inclusion and exclusion. The role of the liberal democratic state in the regulation of gender relations is explored. Team work forms the core of student learning in

discussion and project groups. Student learning activities are focussed on the development of skills involved in reading and constructing academic arguments and in finding and making sense of information using electronic sources. The subject is divided in four modules, each of which explores one theme and involves developing a particular set of research skills.

POL 301 Politics Internship 16cp

Spring/ Autumn Wollongong Flexible

Summer 2004/05 Wollongong Flexible

Contact Hours: Equivalent to 3hrs per week.

Prerequisites: At the discretion of the Convenor of the politics program.

Assessment: Students will work with a supervisor at their placement. They will be required to submit a project based on their experiences 100%.

Subject Description: This subject will enable students to undertake internships in relevant political institutions both in Australia and overseas. Students undertaking this subject will be attached to a political institution where they will undertake duties as directed by their supervisor in that institution. The subject is worth 16cps because it is the equivalent of two 300 level subjects.

POL 314 Power and the Modern State 8cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hr tutorial per week

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL)

Assessment: tutorial paper 20%; Research Essay 50%; Examination 30%

Subject Description: Examines the nature and exercise of power in the modern state. Surveys liberal, socialist and conservative writings on power and the state in relation to the development of the types of polity that characterise modern advanced industrial countries such as Australia and countries in Europe, East Asia and North America. Analyses concepts such as reason of state, sovereignty, class, individualism, civil society, nation, the welfare state and the idea of the decline the state.

POL 318 The Asian Tigers - Newly Industrialising Countries in Transition 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour tutorial per week.

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL)

Assessment: tutorial paper 20%; essay 40%; exam 30%; tutorial participation 10%

Subject Description: Once they were called "miracle" economies. The extraordinarily rapid economic growth of these Newly Industrialising Countries - South Korea, Taiwan and Singapore - seemed to point the way forward for "third world" societies everywhere. But today the Tigers are in serious economic crisis - the miracle has turned into a mess. Some have argued that the earlier success of the Tiger economies derived from the cultural values of their people. Others claimed that their political structures or economic policies were the key to their achievements. This subjects looks at these and other explanations and places them in the context both of older processes of industrialisation - particularly those which took

place in Europe and Japan - and of the continuing poverty of "third world" societies today. Finally, we will examine the shifts from authoritarian to civilian government and the effects on economy and society in these states.

POL 323 North & South: Approaches to Relationships between Advanced Industrial and Less Developed Countries 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour tutorial per week.

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL).

Assessment: tutorial paper 20%; essay 40%; exam 30%; tutorial participation 10%

Subject Description: The subject analyses some of the most important approaches towards the practice and study of international relations as they apply to development in and relations between advanced, industrialising and less developed countries. Attention is paid to South-East Asia and the South Pacific, as well as the newly industrialising countries of Latin America and East Asia, regional co-operation, and other aspects of the foreign relations of countries in both regions. Topics studied include diplomacy, defence, trade, investment and other kinds of international inter-actions.

POL 324 Culture and Politics 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour tutorial per week.

Pre-requisites: (14 cp of POL with 8cp at 200-level) or (HIST210 with 6cp of POL)

Assessment: tutorial paper 30%; essay 40%; exam 30%

Subject Description: This subject examines key debates concerning cultural politics in the twentieth century. Particular attention is paid to debates about Marxism and modernism, the political impact of mass culture, feminist cultural politics and the political significance of postmodernism. Key intellectual groupings analysed include the Frankfurt School, the Birmingham Centre for Contemporary Cultural Studies, American and French cultural feminism, the New York intellectuals, the Situationists. A major focus of the subject is upon the ways in which culture and politics intersect, the cultural forms which are most bound up with the world of politics and the political processes which are shaped by cultural forces.

POL 401 Politics IV (Honours) 48cp

Annual Wollongong On Campus

Contact Hours: 2 hour seminar per week.

Pre-requisites: 52 credit points in a Politics major at an average of no less than 70%

Assessment: Thesis 60%; essays 40%

Subject Description: Requirements: (1) Research thesis of 15,000-20,000 words, based on student's own supervised research and making a modest contribution to political knowledge; (2) Two to three major essays totalling 11,000 - 12,000 words based on the seminar series (3) Regular attendance at weekly honours seminars (two sessions); (4) A work in progress report to be delivered to the seminar group

POL 430 Joint Honours in Politics and Another Discipline 48cp

Annual Wollongong On Campus

Contact Hours: 2 hour seminar per week.

Pre-requisites: 52 credit points in a Politics major at an average of no less than 70%.

Assessment: Depends on the nature of the combined degree

Subject Description: Students are advised to contact the Head of Program well before the session in which they intend to begin their Honours year so that precise course requirements can be arranged with the other Program.

SOC 103 Aspects of Australian Society 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week.

Assessment: Report and exercises 20%; tutorial presentation 10%; tutorial participation 10%; Major essay (1500 words) 25%; Examination 35%

Subject Description: The subject concentrates on the basic issues involved in understanding both society in general, globalisation and contemporary Australian society. Themes of inequality and power are explored through the four dimensions of class, gender, ethnicity and the environment. The ways in which our individual lives intersect with the broader social structures are explored thorough an examination of family life, paid work, the influence of the media, and the impact of social movements.

SOC 110 Understanding Audiences 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour tutorial per week.

Assessment: Content analysis exercise 30%; Focus group exercise 30%; End of session exam 40%

Subject Description: Understanding the nature of media audiences is fundamental to media and communication studies. This subject examines the concept of audience from a variety of perspectives. Issues and topics include: the creation of audiences by the media; media audiences for popular culture (music-videos, magazines, sport); fans and fandom ; advertising; television ratings; the gendered audience. A fundamental understanding of quantitative and qualitative research into various audience groupings, the use of appropriate analytical tools, and the ability to critically analyse academic and industry-based audience research are some of the skills taught in this subject.

SOC 203 Explaining Society 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week

Pre-requisites: (12 credit points)

Assessment: Article review 20%; seminar paper 40%; Mid session exam 20%; Final Exam 20%.

Subject Description: Students are introduced to sociological theory, considered as a constantly evolving form of socially organized practical activity. What do people do with sociological theories, and what do sociological theories do with people? Examples will be drawn from a wide variety of classic and contemporary writings in sociology and cognate areas of the human sciences. We will emphasise seeking commonalities and parallels among theories with a view to possible accommodation

or synthesis, while identifying outstanding points of disagreement and considering various means for their resolution in logical analysis, empirical research and application to questions of policy or organisation.

SOC 205 Sociology of the Family 8cp
Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hr seminar per week

Pre-requisites: (12 credit points)

Assessment: Interview transcript 20%; seminar presentation & paper 30%; seminar preparation 10%; Interpretive analysis 40%

Subject Description: The family occupies a contradictory place in contemporary social thought, on one hand seen as natural part of social life and on the other in crisis. This subject explores the diverse sociological approaches to the family through a comparative analysis of family life in Australia and selected Asian countries. It places these theoretical perspectives in the context of the changes in family form and the life cycle from early modern times to the present.

SOC 206 Youth and Popular Culture 8cp
Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week

Pre-requisites: (12 credit points)

Assessment: Policy analysis paper (20%); Subcultures project (40%); End of session exam (40%)

Subject Description: This subject reviews sociological conceptions of culture, explores the creation of sub-cultures, and identifies major forms, and theories, of contemporary popular culture. It will evaluate the position of young people in Australian society, and analyse the development of youth policy in terms of how society constructs youth as a social problem and how the state politically regulates young people's lives. Finally it will also consider youth as social agents (e.g. as consumers and citizens) and consider the many ways youth construct and use a variety of popular cultural forms (e.g. fashion, music, dance).

SOC 231 Social Analysis 8cp
Spring Wollongong On Campus
Spring Shoalhaven Flexible
Spring Batemans Bay Flexible
Spring Bega/ Moss Vale Flexible

Contact Hours: Flexible delivery, lectures face to face, lecture notes, 2 hour seminar (3hours equivalent per week)

Pre-requisites: (12 credit points)

Exclusions: Not to count with SOC296

Assessment: Report review 10%; Research proposal 20%; Short answer exercises 30%; Research report 40%

Subject Description: This subject introduces students to key methods in social research: literature-based research, content analysis of documents, secondary analysis of statistics, and observation. Students will learn the value of using multiple research methods to explore and explain social relations. This is a skills based subject which includes undertaking library research, constructing and reading tables, manipulating a computer database, and writing a research report. The students will study aspects of the University of Wollongong.

SOC 242 Contemporary Issues in Society 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture and 2 hour seminar per week.

Pre-requisites: (12 credit points)

Assessment: Introductory essay 25%; tutorial presentation 20%; Participation 15%; Major essay (2000 words) 40%

Subject Description: The subject will extend the concepts and forms of argument introduced in 100 level subjects to current social issues. The focus will vary from year to year, depending upon the prominence of particular social issues and the availability of staff. Among topics that might be covered are: Aborigines, unemployment, globalisation, family forms, welfare forms and poverty.

SOC 243 Contemporary Issues in Society 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture and 2 hour seminar per week.

Pre-requisites: (12 credit points)

Exclusions: Not to count with HIST287

Assessment: Critical summaries 10%; mid-session class test 25%; oral presentation 20%; subject summary assignment 45%

Subject Description: This subject will examine the intersection of culture, economy and religion in Asia. It will analyse the significance of comparative approaches in sociology and anthropology in the age of globalisation. Drawing upon contrasting examples from contemporary Asian societies, particularly South Asia this subject will investigate some of the taken for granted assumptions about the process of social change. It will consider the notion of difference to explore the ways in which diverse groups within the region assert their cultural identities, resist marginalisation and critique forms of inequality. We will also pay attention to how Asian cultures have been represented in Western texts.

SOC 244 Punishment: Purpose, Practice, Policy 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week

Pre-requisites: (12 credit points)

Assessment: Research essay 50%; Concept paper 30%; Group presentation 20%

Subject Description: Why do we punish those who break the law; what benefit is gained, and for whom, from imprisonment and other forms of criminal justice sanctions? Are jails for retribution, rehabilitation, deterrence, revenge, a symbol of control or order, a way to make us feel superior? Once some the reasons or justifications for punishment are addressed we look at some of the multiple ways to punish offenders and some policy options that can, or cannot make a difference. The course is an investigation into the more general issue of what we as a society get out of punishment and what it costs each of us, ie the differential impact of punishment on various sections of society.

SOC 308 Social and Public Policy 8cp

Spring Wollongong Flexible

Spring Shoalhaven Flexible

Spring Batemans Bay Flexible

Spring Bega/ Moss Vale Flexible

Contact Hours: Wollongong: lectures face to face & online interaction + 2hour weekly seminar (3hour equivalent per week), Other Campuses: Flexible delivery, online lectures, video conference & online interaction + 2hour weekly seminar (3hours equivalent per week)

Pre-requisites: (16cp at 200-level Sociology) or (16cp at 200-level Politics) or (ARTS113 and 16cp at 200-level incl SOC231)

Assessment: Policy briefing paper 20%; submission presentation 30%; media exercise 10%; major essay 40%

Subject Description: This subject explores the relationship between social/public policy, policy models and sociological theory. The discussion of social/public policy in Australia will examine the changing role of the State, the development and impact of policy, and the historical and materialist base in which the State and its policies are located. Students will examine a wide range of contemporary policy concerns in Australia. This subject examines the theory and practice of policy analysis.

SOC 310 Community Organisations, the Third Sector and Civil Society 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture; 2 hour seminar per week

Pre-requisites: (16 cp at 200-level)

Assessment: Research paper (45%); Organisational project (35%); Presentation (20%)

Subject Description: When we see or hear the terms 'community organisations', 'volunteers', the 'community sector' and 'charities' many Australians think of the Salvos' (people feeding the poor and destitute, giving out blankets), the Red Cross and the Rural Fire Service (volunteering). This subject explores the diversity of these and other organisations found in the third sector, their history and role in contemporary society. The subject looks at some emerging theory about these organisations. It examines some of the major internal and external pressures facing organisations in an era of welfare state contraction, as well as the implication for workers, managers, volunteers and service users.

SOC 318 Modernity, Development & Social Change 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2hour tutorial per week

Pre-requisites: 16 cp in Sociology at 200-level

Assessment: Analysis of development issue and policy 30%; seminar presentation & paper 30%; Class test 15%; and seen examination 25%

Subject Description: This subject will examine the development experience of people in the new global order. It will introduce students to the debates on modernity and development that emerged following the break up of European colonial empires. It will examine the ensuing interaction between rich and poor nations, and theoretical explanations for the emergence of international disparities of wealth. In particular it will focus on the Asia-Pacific region and explore the power laden international context in which development discourses are produced. A number of case studies will be utilised to explore local understanding of what constitutes development.

SOC 330 Gender and Society 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 2 hour seminar per week

Pre-requisites: 16 credit points in Sociology at 200 level

Assessment: Concepts paper, 15%; major essay, 50%; exam 35%

Subject Description: Questions such as, how do masculinities and femininities develop, are gender identities unstable, how can we understand patterns of gender relations in a globalising society, and is social justice in gender possible, sit at the center of current debates about gender and society. This subject offers an exploration into the theoretical and practical aspects of gender and its operation in society. It begins by presenting key explanatory approaches to gender, which include: psychoanalytic, functionalist, Marxist and poststructuralist/queer theories. Using this theoretical knowledge, patterns of gender practice within and across institutions such as, the family, media, law, sport, the State and education will be investigated. The aim will be to challenge traditional knowledge about masculinity and femininity, and gender relations and practice so as to uncover possibilities for a new social justice in gender.

SOC 341 Special Topics in Sociology 8cp

Autumn/ Spring Wollongong On Campus

Contact Hours: see Convenor of Program

Pre-requisites: (16 cp at 200-level Sociology including SOC203 and SOC231 and permission of Convenor of Program)

Subject Description: Topics for this subject may be chosen from any area of Sociology which the Convenor of Program considers to be of suitable substance and level to be offered as a SOC300 subject. This will be a reading course offered under the direct supervision of a member of staff. For details of availability of topics offered, students should consult the Convenor of Program. This subject is available only in special circumstances.

SOC 349 Social Regulation Policies and Issues 8cp

Autumn Wollongong On Campus

Contact Hours: 2.5 hrs seminar

Pre-requisites: (16cp at 200-level) or (16cp at 200 level LAW or LLB)

Assessment: Research essay 50%; concept paper 30%; group presentation 20%

Subject Description: How are your everyday practises regulated or is social regulation only for those who need it, those who transgress like deviants, the mentally ill, criminals, youth 'gangs', dole 'bludgers', welfare 'cheats', etc? Do we only experience social regulation through institutions and their processes, for example, medicine, law and social security? The theory of governance or governmentality (how the social is governed) practises of self (how we govern our 'self') and neo-liberalism (the politics through which society is governed) will be used to address these questions. The theories will be linked to a number of current issues including, self-esteem, crime prevention, pumping iron at the gym and employment.

SOC 400 Sociology IV Honours 48cp

Annual Wollongong On Campus

Contact Hours: 2 hour seminar per week

Pre-requisites: Major in Sociology with distinction level results in two or more 300-level Sociology subjects

Assessment: 50% Thesis, 50% Coursework

Subject Description: To be awarded a BA(Hons) in Sociology students must successfully complete Soc910 and two other

subjects to be agreed with the Honours Coordinator. Students shall not undertake subjects substantially similar to those already completed as part of their previous studies. Students must also undertake a supervised research project to be presented in a thesis of approximately 15,000 words.

SOC 450 Joint Honours in Psychology and Sociology 48cp

Annual Wollongong On Campus

Contact Hours: see Honours coordinator

Pre-requisites: Major in Sociology with distinction level results in two or more 300-level Sociology subjects

Assessment: 50% Thesis and 50% coursework

Subject Description: For details of the four year program for students intending to enrol in this subject, refer to entry under Program of Psychology.

SOC 451 Joint Honours in Sociology and Another Discipline 48cp

Annual Wollongong On Campus

Contact Hours: see Honours Coordinator

Pre-requisites: Major in Sociology with distinction level results in two or more 300-level Sociology subjects

Assessment: 50% thesis and 50% coursework

Subject Description: The combined Honours course will consist of a program of study totalling 48 credit points approved by the Sociology Head of Program Head of Sociology in collaboration with the Head of the other Program concerned. The program will normally be composed of elements offered at 400-level by the two Programs.

SPAN151 Spanish for Beginners 1 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture, 3 hours tutorial, 1 hour laboratory per week.

Assessment: Continuous assessment 90%; Participation 10%

Subject Description: This multi-media subject for beginners or near beginners in Spanish presupposes no prior study of the language. It emphasises oral communication (listening and speaking) and the development of competence in reading and writing through a functional-notional approach with a major emphasis on the communicative functions and structural aspects of the language and the development of those skills necessary to fulfil this.

SPAN152 Spanish for Beginners 2 6cp

Spring Wollongong On Campus

Contact Hours: 1 hour lecture, 3 hours tutorial, 1 hour laboratory per week

Pre-requisites: SPAN151

Assessment: Continuous assessment 90%; Participation 10%

Subject Description: The programme begun in SPAN 151 is sustained and developed, advancing students proficiency in listening, speaking, reading and writing, and emphasising both communicative and structural aspects of the language.

SPAN251 Spanish Intermediate I 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture; 2hrs tutorial; 1hr laboratory pw.

Pre-requisites: (SPAN152 or equivalent)

Exclusions: SPAN205

Assessment: Continuous assessment of assignments, presentations, tests and participation

Subject Description: This subject further develops all the communicative skills in Spanish through the introduction of more complex language structures and active vocabulary development for use in oral communication, reading comprehension, stylistic analysis and written communication and composition.

SPAN252 Spanish Intermediate II 8cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2hrs tutorial, 1hr laboratory pw.

Pre-requisites: (SPAN251 or equivalent)

Exclusions: SPAN206

Assessment: Continuous assessment of assignments, presentations and tests

Subject Description: The programme for SPAN 251 is continued and expanded.

STS 100 Social Aspects of Science and Technology 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour lecture; 1 hour tutorial per week

Exclusions: (STS 103) OR (STS 190) OR (STS 200) OR (STS 203) OR (STS 290)

Assessment: Essays, presentations and class participation

Subject Description: This subject introduces different ways of analysing the social and historical dimensions of science, medicine and technology - their origins, dynamics, impacts and management. After breaking down some common myths about science and technology and their relation to society, it shows how we can conceptualise and investigate in a more fruitful way the formation of scientific knowledge, the development of technological artefacts and systems, and debates and policies concerning scientific and technological issues.

STS 112 The Scientific Revolution: History, Philosophy & Politics of Science 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture; 1 hour tutorial per week

Exclusions: (STS 117) OR (STS 192) OR (STS 212) OR (STS 217) OR (STS 292) OR (HIST250)

Assessment: Essays, presentations and class participation

Subject Description: This subject introduces fundamental issues and techniques in the history and philosophy of science. It examines the origins of modern European science, as exemplified in the work of Copernicus, Galileo, Newton and others. The social, religious, political and economic factors shaping the emergence and content of the new science are analysed. Emphasis is placed on critical historical thinking and use of tools from the sociology of scientific knowledge.

STS 116 Environment in Crisis: Technology and Society 6cp**Spring** Wollongong On Campus**Contact Hours:** WebCT lecture, 2 hour tutorial per week**Exclusions:** (STS 216) OR (STS 218)**Assessment:** Essay, presentations, test and class participation

Subject Description: This subject deals with the technological and social causes of environmental problems and the obstacles in the way of solutions being found to these problems. A range of case studies is used to illustrate the role of human activities in the environmental crisis and its solution. A focus on particular industries is complemented by an examination of the parts played by the media, governments, scientists, corporations and the community.

STS 120 Technology in Society: East and West 6cp**Spring** Wollongong On Campus**Contact Hours:** 2hour lecture, 1hour tutorial per week**Exclusions:** (STS 220) OR (STS 221)**Assessment:** Essays, presentations and class participation

Subject Description: The role of technology in the functioning of the modern industrial nation has become the focus of international attention. The Asia-Pacific region has expanded in influence, transnational corporations have proliferated and the older industrial nations are attempting to adjust. Why have these changes taken place and what do they mean? This subject investigates the social, economic, and political context of technological change.

STS 128 Computers in Society 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour lecture 1 hour tutorial per week.**Exclusions:** STS 228**Assessment:** Essays, presentations and class participation

Subject Description: This subject examines the development, role and implications of computers. How are computers being applied in factories, offices and schools? What is their effect on work? What patterns of employment are they helping to create? Has job loss from their introduction been compensated by new economic activity? Are computers leading to increased political control? What are their implications for privacy? Students are introduced to relevant concepts and theoretical frameworks from the social sciences.

STS 200 Social Aspects of Science and Technology 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour lecture and 1 hour tutorial per week**Pre-requisites:** 24 credit points**Exclusions:** (STS 100) OR (STS 103) OR (STS 190) OR (STS 203) OR (STS 290)**Assessment:** Essays, presentations and class participation

Subject Description: This subject introduces different ways of analysing the social and historical dimensions of science, medicine and technology - their origins, dynamics, impacts and management. After breaking down some common myths about science and technology and their relation to society, it shows how we can conceptualise and investigate in a more fruitful way the formation of scientific knowledge, the development of

technological artefacts and systems, and debates and policies concerning scientific and technological issues.

STS 212 Revolutions in Science: History, Philosophy & Politics of Science 8cp**Spring** Wollongong On Campus**Contact Hours:** 2hour lecture and 1hour tutorial per week**Pre-requisites:** 36 credit points**Exclusions:** (STS 112) OR (STS 117) OR (STS 192) OR (STS 217) OR (STS 292) or (STS 250)**Assessment:** Essays, presentations and class participation

Subject Description: This subject introduces fundamental issues and techniques in the history and philosophy of science. It examines the origins of modern European science, as exemplified in the work of Copernicus, Galileo, Newton and others. The social, religious, political and economic factors shaping the emergence and content of the new science are analysed. Emphasis is placed on critical historical thinking and use of tools from the sociology of scientific knowledge.

STS 215 Globalisation: technology, Culture and Media 8cp*Not on offer in 2004***Pre-requisites:** 36 credit points**Exclusions:** STS 315**Assessment:** Essays, presentations and class participation

Subject Description: The view that scientific, technological and economic development automatically leads to progress is very common. It underlies the thrust for spreading western technological and economic systems throughout the world. The historical development of this view is critically examined and the role that the media has played in its propagation discussed.

STS 216 Environment in Crisis: Technology & Society 6cp**Spring** Wollongong On Campus**Contact Hours:** WebCT lecture and 2hour tutorial per week**Pre-requisites:** 36 credit points**Exclusions:** (STS 116) OR (STS 218)**Assessment:** Essay, presentations, test and class participation

Subject Description: This subject deals with the technological and social causes of environmental problems and the obstacles in the way of solutions being found to these problems. A range of case studies is used to illustrate the role of human activities in the environmental crisis and its solution. A focus on particular industries is complemented by an examination of the parts played by the media, governments, scientists, corporations and the community.

STS 218 Environment in Crisis: Technology and Society 8cp**Spring** Wollongong On Campus**Spring** Shoalhaven Flexible**Spring** Batemans Bay Flexible**Spring** Bega/ Moss Vale Flexible**Contact Hours:** WebCT lecture and 2hour tutorial per week**Pre-requisites:** 36 credit points

Exclusions: (STS 116) OR (STS 216)

Assessment: Essay, presentations, test and class participation

Subject Description: This subject deals with the technological and social causes of environmental problems and the obstacles in the way of solutions being found to these problems. A range of case studies is used to illustrate the role of human activities in the environmental crisis and its solution. A focus on particular industries is complemented by an examination of the parts played by the media, governments, scientists, corporations and the community.

STS 220 Technology in Society: East and West 8cp

Spring Wollongong On Campus

Contact Hours: 2hour lecture and 1 hour tutorial per week

Pre-requisites: 36 credit points

Exclusions: STS 120 OR STS 221

Assessment: Essays, presentations and class participation

Subject Description: The role of technology in the functioning of the modern industrial nation has become the focus of international attention. The Asia-Pacific region has expanded in influence, transnational corporations have proliferated and the older industrial nations are attempting to adjust. Why have these changes taken place and what do they mean? This subject investigates the social, economic, and political context of technological change.

STS 221 Technology in Society: East and West 6cp

Spring Wollongong On Campus

Contact Hours: 2hour lecture and 1 hour tutorial per week.

Pre-requisites: 36 credit points

Exclusions: (STS 120) OR (STS 220)

Assessment: Essays, presentations and class participation

Subject Description: The role of technology in the functioning of the modern industrial nation has become the focus of international attention. The Asia-Pacific region has expanded in influence, transnational corporations have proliferated and the older industrial nations are attempting to adjust. Why have these changes taken place and what do they mean? This subject investigates the social, economic, and political context of technological change.

STS 228 Computers in Society 8cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture and 1 hour tutorial per week

Pre-requisites: 24 credit points

Exclusions: STS 128

Assessment: Essays, presentations and class participation

Subject Description: This subject examines the development, role and implications of computers. How are computers being applied in factories, offices and schools? What is their effect on work? What patterns of employment are they helping to create? Has job loss from their introduction been compensated by new economic activity? Are computers leading to increased political control? What are their implications for privacy? Students are introduced to relevant concepts and theoretical frameworks from the social sciences.

STS 235 The Politics of Risk 8cp

Spring Wollongong On Campus

Contact Hours: 3hour lecture/seminar per week

Pre-requisites: 36 credit points

Exclusions: (STS 335) OR (STS 376) OR (STS931)

Assessment: Essays, presentations and class participation

Subject Description: This subject examines hazards to human life and health associated with technologies - in the workplace and the wider environment. It focuses on the politics and economics of the generation and distribution of hazards; methods and problems in analysing and evaluating risks; discourses, debates and decision-making on hazards; and strategies for managing them. It compares different theoretical approaches for explaining these processes and debates and for informing intervention in them.

STS 240 Technological Change, Popular Culture and New Media 8cp

Spring Wollongong On Campus

Contact Hours: 3 hour lecture/seminar

Pre-requisites: 36 credit points

Exclusions: (STS241) OR (STS340)

Assessment: Essays, presentations and class participation

Subject Description: Technological change has a long history of transforming means of communication, from the printing press to the internet. New means of expression become possible, from the novel to electronic music. Popular culture interacts with technology both through artistic production and commercial distribution and control. Theories of communication and technology help to make sense of this complex dynamic.

STS 241 Technological Change, Popular Culture and New Media 6cp

Spring Wollongong On Campus

Contact Hours: 3 hour lecture/seminar

Pre-requisites: 36 credit points

Exclusions: (STS240) OR (STS340)

Assessment: Essays, presentations and class participation

Subject Description: Technological change has a long history of transforming means of communication, from the printing press to the internet. New means of expression become possible, from the novel to electronic music. Popular culture interacts with technology both through artistic production and commercial distribution and control. Theories of communication and technology help to make sense of this complex dynamic.

STS 250 From Molecular Genetics to Biotechnology 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour lecture and 2hour tutorial per week

Pre-requisites: (Any STS subject) or (BIOL103) or (other relevant subject as determined by Head of Program)

Exclusions: STS350

Assessment: Essays, presentations and class participation

Subject Description: This subject examines the development, impact and social context of molecular biology and genetic engineering. Topics may include: the development of a model for DNA; the development of recombinant DNA techniques;

Subject Descriptions

Asilomar and safety; corporate influence on molecular biology; ethical and political issues in genetic screening and genetic engineering; regulation of biotechnology and social control of research priorities; legal and moral issues in the patenting of life forms; the human genome project; the release of recombinant organisms; and biotechnology industry in Australia.

STS 278 Scientific and Technological Controversy 8cp

Spring Wollongong On Campus
Contact Hours: 1 hour lecture and 2 hour tutorial per week
Pre-requisites: 36 credit points
Exclusions: STS329
Assessment: Essays, presentations and class participation

Subject Description: Recent studies of scientific and technological controversies have shown that scientific 'facts' and technological systems cannot be dissociated from the social and political interests which they embody. According to this approach, controversies must be treated as inherently social and political processes where there are no impartial experts. This subject will consider the process by which scientific and technological controversies arise, are prosecuted and resolved, making extensive use of case studies.

STS 288 Science and the Media 8cp

Autumn Wollongong On Campus
Contact Hours: 3hour lecture/seminar per week
Pre-requisites: 36 credit points
Exclusions: STS388
Assessment: Essays, presentations and class participation

Subject Description: Science increasingly frames social debates, and is itself socially directed. The media play a central role in both processes, a role often subject to criticism, especially from scientists. This subject examines the complex social dimensions of the relation between science, media and the 'public'. Topics may include: scientific knowledge in political debates; public understanding of science; media portrayals of science and scientists; science journalism; science as 'public knowledge'; and pro- versus anti-science 'movements'.

STS 300 The Environmental Context 8cp

Autumn Wollongong On Campus
Autumn Shoalhaven Flexible
Autumn Batemans Bay Flexible
Autumn Bega/ Moss Vale Flexible
Contact Hours: WebCT lecture, 2hour tutorial per week
Pre-requisites: 24 cp at 100-level

Assessment: Essay, presentations, test and class participation
Subject Description: Perspectives on the wider political, economic and social context of the environment are developed and explored. Topics covered include: an analysis of the principles and goals of sustainable development including issues of growth, valuation of the environment, the global dimension and equity; politics and social dynamics of environmental controversies; the politics of scientific knowledge about the environment; methods and policies for managing the environment.

STS 306 Special Topics in the Social and Policy Aspects of Engineering 6cp

Spring Wollongong On Campus
Contact Hours: Autumn 3 hours per week
Pre-requisites: ENGG161 and Approval of Head of Program
Assessment: Essays and/or presentations

Subject Description: This subject allows Engineering students to examine specific social, historical or policy aspects of engineering projects or of the work of engineers or technologists. Students must obtain the approval of the Engineering Faculty for the subject to count towards their degree and the approval of the STS Program for a specific programme of work.

STS 315 Globalisation: Technology, Culture and Media 8cp

Not on offer in 2004
Pre-requisites: 16 credit points at 200 level
Exclusions: STS215

Assessment: Essays, presentations and class participation
Subject Description: The view that scientific, technological and economic development automatically leads to progress is very common. It underlies the thrust for spreading western technological and economic systems throughout the world. The historical development of this view is critically examined and the role that the media has played in its propagation discussed.

STS 335 The Politics of Risk 8cp

Spring Wollongong On Campus
Contact Hours: 3hour lecture/seminar per week
Pre-requisites: 16 credit points at 200 level
Exclusions: (STS 235) OR (STS 376) OR (STS931)

Assessment: Essays, presentations and class participation
Subject Description: This subject examines hazards to human life and health associated with technologies - in the workplace and the wider environment. It focuses on the politics and economics of the generation and distribution of hazards; methods and problems in analysing and evaluating risks; discourses, debates and decision-making on hazards; and strategies for managing them. It compares different theoretical approaches for explaining these processes and debates and for informing intervention in them.

STS 340 Technological Change, Popular Culture and New Media 8cp

Spring Wollongong On Campus
Contact Hours: 3hour lecture/seminar per week
Pre-requisites: 16 credit points at 200 level
Exclusions: (STS 240) OR (STS 241)

Assessment: Essays, presentations and class participation
Subject Description: Technological change has a long history of transforming means of communication, from the printing press to the internet. New means of expression become possible, from the novel to electronic music. Popular culture interacts with technology both through artistic production and commercial distribution and control. Theories of communication and technology help to make sense of this complex dynamic.

STS 350 From Molecular Genetics to Biotechnology 8cp**Autumn** Wollongong On Campus**Contact Hours:** 1 hour lecture and 2hour tutorial per week**Pre-requisites:** 16 credit points at 200 level**Exclusions:** STS 250**Assessment:** Essays, presentation and class participation

Subject Description: This subject examines the development, impact and social context of molecular biology and genetic engineering. Topics may include: the development of a model for DNA; the development of recombinant DNA techniques; Asilomar and safety; corporate influence on molecular biology; ethical and political issues in genetic screening and genetic engineering; regulation of biotechnology and social control of research priorities; legal and moral issues in the patenting of life forms; the human genome project; the release of recombinant organisms; and biotechnology industry in Australia.

STS 376 The Politics of Risk 6cp**Spring** Wollongong On Campus**Contact Hours:** 3hour lecture/seminar per week**Pre-requisites:** 16 credit points at 200 level**Exclusions:** (STS 235) OR (STS335) OR (STS931)**Assessment:** Essays, presentations and class participation

Subject Description: This subject examines hazards to human life and health associated with technologies - in the workplace and the wider environment. It focuses on the politics and economics of the generation and distribution of hazards; methods and problems in analysing and evaluating risks; discourses, debates and decision-making on hazards; and strategies for managing them. It compares different theoretical approaches for explaining these processes and debates and for informing intervention in them.

STS 378 Scientific and Technological Controversy 8cp**Spring** Wollongong On Campus**Contact Hours:** 3hour lecture/seminar per week**Pre-requisites:** (24cp at 200 level)**Exclusions:** STS229**Assessment:** Essays, presentations and class participation

Subject Description: Recent studies of scientific and technological controversies have shown that scientific 'facts' and technological systems cannot be dissociated from the social and political interests which they embody. According to this approach, controversies must be treated as inherently social and political processes where there are no impartial experts. This subject will consider the process by which scientific and technological controversies arise, are prosecuted and resolved, making extensive use of case studies.

STS 388 Science and the Media 8cp**Autumn** Wollongong On Campus**Contact Hours:** 3hour lecture/seminar per week**Pre-requisites:** 16 credit points at 200 level**Exclusions:** STS 288**Assessment:** Essays, presentations and class participation

Subject Description: Science increasingly frames social debates, and is itself socially directed. The media play a central role in both processes, a role often subject to criticism,

especially from scientists. This subject examines the complex social dimensions of the relation between science, media and the 'public'. Topics may include: scientific knowledge in political debates; public understanding of science; media portrayals of science and scientists; science journalism; science as 'public knowledge'; and pro- versus anti-science 'movements'.

STS 390 Media, War and Peace 8cp**Autumn** Wollongong On Campus**Contact Hours:** 3hour lecture/seminar per week**Pre-requisites:** 24 credit points at 200 level

Assessment: Oral presentation 20%, Commentaries 30%, 3 worth 10% each; Essay 50%

Subject Description: War and violence are staples of media coverage. Explaining the content and style of coverage requires understanding both of media dynamics and international politics. Through case studies of war and peace journalism, military censorship and media management, and the psychology and politics of denial and acknowledgement of atrocities, students should learn how to interpret and intervene in media coverage on war and peace, violence and nonviolence. Use will be made of frameworks from communication theory, politics, and peace research.

STS 399 Research Topics in Science and Technology Studies 8cp**Autumn/ Spring** Wollongong On Campus

Pre-requisites: 16 credit points at 200 level and approval of Convenor of Program

Assessment: Written assignments and seminar presentations as required

Subject Description: This subject involves reading and research, supervised by one or more members of STS staff, and the production of a major report, on a topic the Program considers suited to the student's background, record and specialisation. A seminar presentation and/or other written assignments may also be required in the course of the research. Students must seek approval to enrol and must negotiate a topic before session starts.

STS 400 Science, Technology and Society Studies 48cp**Annual** Wollongong On Campus

Prerequisites: 1. Major in STS; 2. Students must have attained at least Distinction-level results in two or more 300-level subjects in STS; 3. Students must complete an interview with the School Honours Coordinator to determine the suitability of their proposed research topic and to ensure that supervision support is available. (Please note that: (i) Pre-requisites may be waived in exceptional circumstances; (ii) Students enrolling with a degree from another institution must meet equivalent pre-requisites).

Assessment: Thesis and coursework

Subject Description: Honours students undertake a 12 credit point subject on theory and methods in STS, specialist subjects totalling 12 CP, and a 24 credit point thesis. Students contribute to a series of seminars through the year. Students considering Honours in STS should contact the Convenor of Program well in advance to seek approval for enrolment, discuss their programme, and negotiate a thesis topic and supervisor.

**STS 430 Joint Honours in Science, Technology 48cp
and Society & Another Discipline**

Annual Wollongong On Campus

Pre-requisites: Approval of Convenor of Program

Assessment: Thesis and coursework

Subject Description: Students should have completed studies in both disciplines accepted as equivalent to a major. The subject consists of components from the Honours programmes of each unit approved by both Convenors as forming a coherent programme, including a thesis. Students contribute to a series of seminars in STS through the year. Students considering Joint Honours should contact the unit Convenors well in advance to seek approval for enrolment, discuss their programme, and negotiate a thesis topic and supervisors.

COMMERCE SUBJECT DESCRIPTIONS

ACCY100 Accounting IA 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Bega	On Campus
Autumn	Moss Vale	On Campus
Spring	Wollongong	On Campus
Spring	Dubai	On Campus

(Feb-May 2004)

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop and 1 hour Computer Lab per week.

Assessment: See Subject Outline

Subject Description: Accounting IA is an introduction to the processes of accounting and financial management and is concerned with money, records of money, calculations of income and wealth; financial decision making; the information that can be provided by an accounting system as a basis for decision making and the techniques of processing such information.

ACCY102 Accounting IB 6cp

Spring	Wollongong	On Campus
Spring	Batemans Bay	On Campus
Spring	Shoalhaven	On Campus
Spring	Bega/ Moss Vale	On Campus
Summer 2004/05	Wollongong	On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop and 1 hour Computer Lab per week.

Pre-requisites: ACCY100 Accounting IA

Assessment: See Subject Outline

Subject Description: Accounting IB builds on the understanding of accounting developed in Accounting 1IA. It examines financial measures of business activities and the systems that enable the measures to be recorded and then reported and communicated to the various stakeholders of entities such as owners (including partners and shareholders), providers of credit (lenders and creditors), management as well as other interested parties.

ACCY201 Financial Accounting IIB 6cp

Spring	Wollongong	On Campus
Spring	Shoalhaven	On Campus
Spring	Batemans Bay	On Campus
Spring	Bega	On Campus
Spring	Moss Vale	On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop and 1 hour Computer Lab per week.

Pre-requisites: ACCY202

Assessment: See Subject Outline

Subject Description: Accounting standards are applied to companies and groups of companies in order to produce external financial reports. The subject contains three distinct but inter-related strands. First, there is a technical strand of knowledge and skills used in applying accounting standards to financial reports. Secondly, there is a contextual strand,

Secondly, there is a contextual strand, which highlights the environment in which financial reporting takes place. Thirdly, there is a theoretical strand, where deeper issues relating to accounting practice will be explored. Lectures, tutorials, workshops and assessment tasks will provide opportunities to develop students' understanding of each of these three strands.

ACCY202 Financial Accounting IIA 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Bega	On Campus
Autumn	Moss Vale	On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop per week.

Exclusions: ACCY292

Assessment: See Subject Outline

Subject Description: This subject provides an introduction to accounting theory and critique, and the preparation of accounting statements to comply with accounting and statutory regulation. The subject also covers reporting requirements for economic groups consisting of multiple legal entities.

ACCY211 Management Accounting II 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Bega	On Campus
Autumn	Moss Vale	On Campus
Summer 2004/05	Wollongong	On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial, 1 hour Workshop per week.

Pre-requisites: ACCY101, ACCY190 or ACCY100 and ACCY102

Exclusions: ACCY212

Assessment: See Subject Outline

Subject Description: This subject examines the design, production and use of accounting and other quantitative information in the planning and control of organisations, including management of the production function, decentralised organisations, derivation of cost relationships and statistical control of costs.

ACCY228 Tax Planning 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221 and FIN251

Assessment: See Subject Outline

Subject Description: The subject provide an overview of the procedures and theory of planning for the optimum level of taxation for an individual and/or a business at different stages in life. Optimal tax planning changes from the intense early years where income is rising and investments are made

Subject Descriptions

through to retirement where income is minimal and investments start to be realised.

ACCY231 Information Systems in Accounting 6cp

Spring Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega On Campus

Spring Moss Vale On Campus

Contact Hours: Normally 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: ACCY101, ACCY190, or ACCY100 and ACCY102

Assessment: See Subject Outline

Subject Description: Management information systems, including data collection and processing, internal control and internal reporting. System design and computer applications.

ACCY302 Financial Accounting III 12cp

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega On Campus

Autumn Moss Vale On Campus

Contact Hours: 3 hour Lecture, 2 hour Tutorial, 1 hour Workshop per week.

Pre-requisites: ACCY201

Assessment: See Subject Outline

Subject Description: Advanced aspects of financial accounting and external reporting with particular reference to developments in accounting theory and professional standards, including critical evaluation and comparison of various financial accounting theories.

ACCY303 Selected Issues in Accounting A 6cp

Not on offer in 2004.

Prerequisites: ACCY201 or ACCY202 and ACCY211

Subject Description: Selected issues in external reporting, including issues in international accounting and comparative accounting standards.

ACCY312 Management Accounting III 6cp

Spring Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega On Campus

Spring Moss Vale On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY211

Assessment: See Subject Outline

Subject Description: An advanced treatment of management accounting theory and its relationship to decision theory, including model building and use, cost prediction, pricing decisions, and the behavioural dimensions of management accounting.

ACCY313 Selected Issues in Accounting B 6cp

Not on offer in 2004.

Prerequisites: ACCY201 or ACCY202 and ACCY211

Subject Description: Selected issues in management accounting, including international management accounting.

ACCY332 Advanced Information Systems in Accounting 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Computer Lab per week.

Pre-requisites: ACCY231

Assessment: See Subject Outline

Subject Description: Advanced aspects of communication and information theory, system evaluation, design, implementation and management, accounting and associated computer applications.

ACCY335 Advanced Information Systems in Accounting II 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Computer Lab per week.

Pre-requisites: ACCY231 or BUSS211 and BUSS212

Assessment: See Subject Outline

Subject Description: To maintain competitiveness in the global electronic market-space organizations need to ensure that their information system and business strategies are aligned. The greatest impediment to this strategic alignment is the inability of technical and non-technical management to effectively communicate. Systems Analysis and Design in Accounting and Finance provides future business managers with the necessary skills to effectively communicate with Information Technology specialists. These skills are developed through the examination of the analysis and design techniques of Entity Relationship (ER) and Resource Event Agent (REA) modeling, in conjunction with an overview of Enterprise Resource Planning Systems (ERP) and Electronic Commerce (e-commerce) implementation issues. In addition to a generic examination of ERP, students will also work through a series of e-commerce computer exercises utilising SAP.

ACCY336 Decision Support Systems 6cp

Not on offer in 2004.

Prerequisites: ACCY231

Subject Description: Nature of, and concepts underlying, decision support systems. Decision support systems for strategic and tactical planning (including corporate planning). Decision support systems for specific areas - selected from: marketing, finance, merchandising, inventory control, production control.

ACCY342 Advanced Auditing 6cp

Spring	Wollongong	On Campus
Spring	Shoalhaven	On Campus
Spring	Batemans Bay	On Campus
Spring	Bega	On Campus
Spring	Moss Vale	On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week, 1 hour Computer Lab per week

Pre-requisites: ACCY201

Assessment: See Subject Outline

Subject Description: Advanced auditing is a capstone subject for students undertaking an accountancy major. It integrates accounting standards, accounting systems, internal controls, and the auditing functions of obtaining and evaluating evidence, and reporting, all within an overview of auditing, and continues through the audit process with emphasis on financial statement audit under the Corporation Law. In addition, the program addresses issues related to electronic data interchange audit.

ACCY343 Forensic Examination and Advanced Assurance Services 6cp

Spring	Wollongong	On Campus
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Contact Hours: Spring 2 hour Lecture, 1 hour Tutorial, 1 hour Computer Lab.

Prerequisites: ACCY201, FIN221 and LAW210

Assessment: See Subject Outline

Subject Description: This subject provides an introduction to forensic examination and advanced assurance services for commercial and not-for-profit entities. Subject content will deal with the nature and extent of fraud in Australia, detection of fraud, error or organisational weakness through an examination of financial and non-financial data and introductory laws of evidence and expert witness report preparation. Students will be introduced to the nature of forensics and its role in the regulatory framework as well as within the legal and ethical framework of corporate governance.

ACCY368 Insolvencies 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: Accounting and legal aspects of corporate and non-corporate insolvencies including liquidations & receiverships, alteration of capital, reconstruction, amalgamation and takeovers, and the use of insolvency procedures as a management strategy.

ACCY372 Topics in Accounting History 6cp

Spring	Wollongong	On Campus
Autumn	Wollongong	On Campus

Contact Hours: 2 hour Lecture, hour Tutorial per week.

Pre-requisites: ACCY201 or ACCY202

Assessment: See Subject Outline

Subject Description: Topics in the history and development of accounting thought.

ACCY380 Accounting For Information Technology 6cp

Autumn/Spring	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: IACT301, ITAC301

Exclusions: ACCY901, ACCY101, ACCY190 or ACCY100 and ACCY102

Assessment: See Subject Outline

Subject Description: An introduction to accounting with special emphasis on the design, interpretation and utilisation of the major types of reports and analyses prepared by accountants for the decision making process.

ACCY403 Theoretical Foundations of Research 6cp

Autumn/Spring	Wollongong	On Campus
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Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: The nature of theory, research and theory formation. A study of the methods used in theory formation, and of attempts to formulate theories of accounting and finance.

ACCY404 Financial Accounting 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hour Seminar per week.

Pre-requisites: ITAC301

Assessment: See Subject Outline

Subject Description: An in-depth study of the basis of external financial reporting, including asset valuation and periodic profit measurement. A study of the elements of financial accountancy and their communication in accounting reports.

ACCY405 International Accounting 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Seminar per week

Pre-requisites: ITAC301

Assessment: See Subject Outline

Subject Description: Differences in accounting thought and standards between countries. Influence of national outlook and policies and of economic infra-structure on accounting practice. Uniform systems of accounting. Corporate growth and its impact on accounting and auditing. Comparative study of auditing and reporting standards, and international aspects of public accounting practice. The multi-national corporation. The effect of changing price levels on accounting for international operations.

ACCY406 Issues in Financial Accounting 6cp
Not on offer in 2004

Prerequisites: ITAC301

Subject Description: Contemporary issues in financial reporting to external parties, including accounting for different classes of assets, liabilities and equities. Legal, institutional and professional reporting requirements including proposals for improvement in accounting principles applied in practice.

ACCY407 Empirical Research Methods 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: The subject provides an overview of the ways accounting and finance researchers identify, formulate and investigate empirical questions in accounting and finance. Subjects include the criteria adopted to select research projects, issues of experimental design, validity threats, measurement problems and statistical analysis. Selected published accounting and finance research will be used to illustrate established methods of empirical research.

ACCY408 Applied Financial Accounting 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Pre-requisites: ITAC301

Assessment: See Subject Outline

Subject Description: Advanced problems in external financial reporting, including accounting for groups of companies, price level accounting and reporting theory involving consideration of taxation and economic implications.

ACCY409 Comparative Accounting Systems 6cp

Not on offer in 2004

Subject Description: An in-depth examination of the patterns of accounting development in different national political environments. Key variables determining the differential accounting development patterns and their implications, in particular, for multinational reporting, will be critically evaluated. Approaches for resolving the problems posed by the diversity of accounting systems will also be considered.

ACCY413 Management Accounting 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Assessment: See Subject Outline

Subject Description: The conceptual basis of management accounting and information systems. An examination of traditional and alternative theories and approaches shaping organisational and behavioural aspects of management accounting, including the contingency approach, the agency approach, control system theories, activity based accounting and critical accounting approaches.

ACCY414 Management Planning and Control Systems 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Assessment: See Subject Outline

Subject Description: An in-depth analysis of selected aspects of the design and evaluation of management accounting planning and control systems in both the private and public sectors.

ACCY416 Studies in Controllership 6cp

Not on offer in 2004.

Subject Description: The role and functions of the Chief Accounting Officer. Designing, installing and managing accounting systems - both financial and managerial. Specific problem areas in controllership, as depicted in selected case studies.

ACCY418 Applied Management Accounting 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week

Assessment: See Subject Outline

Subject Description: An in-depth applied analysis of selected topics in management accounting. Topics chosen could include decision theory and analysis, financial model building, cost prediction and control techniques, pricing, management accounting systems design, and the interrelationships between management and the management accounting system. Theoretical concepts developed in other management accounting subjects will be expanded as needed to support the complex applications being studied.

ACCY433 Studies in Information Systems in Accounting 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: Not on offer in 2004.

Subject Description: Theoretical and practical aspects of contemporary information theory in accounting system evaluation, design, implementation and management, accounting and associated computer applications, sociological and ethical implications and research issues are explored.

ACCY436 Management and Information Systems 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 1 hr Seminar, 1 hr Computer Lab per week.

Assessment: See Subject Outline

Subject Description: The effective use and control of information systems, particularly computer-based information systems, and the likely impact of developments in this area on management functions and how managers carry out those functions.

ACCY443 Auditing and Accounting Information Systems 6cp

Not on offer in 2004.

Subject Description: The general principles of auditing applied to the audit of computer-based accounting systems and the use of computers as an auditing tool. Particular emphasis on the positive aspects of auditing and internal control, including their contribution towards improvements in:

ACCY444 Issues in Auditing 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: An in-depth examination of contemporary topics in auditing with emphasis on controversial and theoretical issues, including social and ethical issues, role of quantitative techniques in the audit function, continuous auditing concept, uncertainty reporting, audit performance evaluation, extension of attest function and public sector auditing.

ACCY461 Professional Practice Accounting 6cp*Not on offer in 2004.*

Subject Description: Statements of Accounting Standards and Statements of Accounting Practice. Accounting Provisions of the Companies Act.

ACCY462 Professional Practice - Auditing, Risk, Assurance and IS 6cp*Not on offer in 2004.*

Subject Description: Statements of Auditing Standards and Statements of Auditing Practice. EDP Systems and Controls.

ACCY463 Professional Practice - Taxation 6cp*Not on offer in 2004.*

Subject Description: Australian Income Tax Assessment Act 1936 as amended with Regulations. Rating Acts and International Agreements.

ACCY468 Insolvencies 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Seminar per week.**Assessment:** See Subject Outline

Subject Description: This subject examines accounting and legal aspects of corporate and non-corporate insolvencies including bankruptcies, liquidations, receivership, alteration of capitol, reconstruction, amalgamation and takeovers.

ACCY473 History of Accounting Thought 6cp*Not on offer in 2004.*

Subject Description: An examination of the environmental factors and processes by which accounting thought, practices and institutions originated and developed in the ancient, medieval and modern eras. Ancient accounts. Special-purpose account-keeping in the Middle Ages. Philosophy, influence and constraints of the double-entry system. Development of basic concepts of continuity, accrual accounting and limited liability. Impact of the Industrial Revolution and changing corporate environment on accounting development. Legislation and institutional influences on accounting.

ACCY474 Accounting Regulation 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Seminar per week**Assessment:** See Subject Outline

Subject Description: An in-depth study of the regulation of accounting practice and procedures, the accounting

profession and of measurement and disclosure in external financial reporting. This could include an examination of the consequences of regulation, alternative institutional arrangement for setting standards, the impact of accounting theory on standard setting, and a historical review of accounting regulation.

ACCY483 Studies in Government Accounting 6cp*Not on offer in 2004.*

Subject Description: A detailed examination of selected areas in federal, state, regional or local government accounting.

ACCY485 Special Topic in Accounting 6cp**Autumn/ Spring** Wollongong On Campus**Contact Hours:** 2 hour Seminar per week**Assessment:** See Subject Outline

Subject Description: A special topic to be selected from any area of financial accounting, management accounting, business finance, information systems or government accounting. The selection will be made by the Head of the School, taking into account the expertise of academic staff, including visiting staff, and the interest of students.

ACCY486 Special Topic in Accounting 6cp**Autumn** Wollongong On Campus**Spring** Wollongong On Campus**Contact Hours:** 2 hour Seminar per week**Assessment:** See Subject Outline

Subject Description: A special topic to be selected from any area of financial accounting, management accounting, business finance, information systems or government accounting. The selection will be made by the Head of the School, taking into account the expertise of academic staff, including visiting staff, and the interest of students.

ACCY493 Research Essay 12cp**Annual** Wollongong On Campus**Pre-requisites:** ITAC301

Subject Description: An individual program determined in consultation with the Head of Discipline.

ACCY495 Research Essay 6cp**Autumn** Wollongong On Campus**Spring** Wollongong On Campus

Subject Description: An individual program determined in consultation with the Head of Discipline.

BUSS102 Computer Systems 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hr Lecture, 2 hr Computer Lab per week.

Assessment: Assignments, mid-session test and final examination.

Subject Description: As an introduction to the fundamentals of computers, this unit studies the principle of operation and the functional components of a modern computer system. It provides a framework to examine the interrelation between

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hardware and systems and application software, and the current trends in computer technology.

BUSS110 Introduction to Business Information Systems 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Bega	On Campus
Autumn	Moss Vale	On Campus
Intake C	Sydney	Modular
Summer 2004/2005	Wollongong	On Campus
Spring (Feb04-May04)	Dubai	On Campus
Summer (June04-Sept04)	Dubai	On Campus
Autumn (Sept04-Jan 05)	Dubai	On Campus
Session 1	INTI Subang Jaya Kuala Lumpur	On Campus

Contact Hours: Normally 2 hour Lecture, 2 hour Computer Lab per week.

Co-requisites: Not to count with CSCI101.

Exclusions: Not to count with CSCI101

Assessment: Assignment, word processing test, spreadsheet test, database test, and final examination

Subject Description: This subject examines the roles of information systems in a modern organisation. Topics covered include: computer hardware, systems software and networks, operating systems/productivity tools, standard business systems, file/data management, processes and modelling techniques used in computer systems development, information systems for management and decision support, security and privacy issues. The practical component includes using the internet, word processing, spreadsheets and database systems.

BUSS111 Business Programming I 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week Summer 2003/2004 TBA

Co-requisites: Not to count with CSCI111

Assessment: Assignments, programming tests, final examination

Subject Description: As an introduction to the fundamentals of programming, this subject aims to develop an understanding of the basic principles of programming, fundamental concepts of data types and simple data structures, as well as to develop skills in the design or well structured solution algorithms to a range of simple classical business computing problems.

BUSS201 User-Centred Business Programming 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS111 or CSCI111

Assessment: Tutorial assignments; practical test; final examination.

Subject Description: The broad aim of this subject is to provide students with an in-depth knowledge of user-centered application design using various visual programming concepts and techniques. The subject will provide students with the opportunity to understand and use the principles of user-centered design and computer-user interface design with visual programming tools and techniques and to understand and use the techniques of Joint Application Development and Rapid Application Development for visual program design. Students will learn to program visually utilising appropriate techniques in a commonly available visual programming environment.

BUSS211 Requirements Determination and Systems Analysis 6cp

Autumn	Wollongong	On Campus
Autumn (Sept04-Jan 05)	Dubai	On Campus

Contact Hours: Normally 2 hour Lecture, 2 hour Tutorial, 1 hour Computer Lab per week.

Pre-requisites: 6cp 100 level BUSS or CSCI

Assessment: Assignments; class test; final examination.

Subject Description: This subject aims to introduce the student to the techniques and technologies of structured systems analysis in the initial stages of the Systems Development Life Cycle. It examines the complementary roles of systems analysts, clients and users of the Systems Development Life Cycle and Object Oriented development methods. Process and Object methods and models are introduced and examined. The student will make use of a Computer Aided Software Engineering (CASE) tool to document solutions to the analysis of typical problems.

BUSS212 Database Management Systems 6cp

Spring	Wollongong	On Campus
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Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial, 1 hour Computer Lab per week.

Pre-requisites: 6 credit points of BUSS100-level or CSCI100-level subjects

Assessment: class tests, assignments, final examination.

Subject Description: This subject aims to introduce students to the theory and practice of designing, implementing and using database management systems. It examines conceptual data modeling using Entity-Relationship Diagrams, introduces the relational data model and discusses techniques for mapping conceptual data models into database designs and the refinement of such designs using normalization theory. Students should acquire skills in relational database querying, using both formal and implemented query languages and will be introduced to the principles of query processing and optimization as well as database file structures. While the subject concentrates on the relational data model, a brief introduction to the object-oriented and object-relational models will also be provided. Students will receive hands-on experience using a commercial tool.

BUSS213 Multimedia in Organisations 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hr Lecture, 2 hr Computer Lab per week.**Co-requisites:** BUSS111 or CSC111**Assessment:** Assignments, final examination.

Subject Description: The subject introduces students to a range of theoretical knowledge/ideas and practical skills associated with the planning, implementation, delivery and management of a small multimedia project. The subject aims to prepare students for involvement in such projects within organisations where the use of multimedia for a wide variety of purposes is steadily increasing. Students will obtain practical experience in using a range of appropriate software, using theoretical ideas to justify choices of representation within a context that involves some constraints. Students will also gain practical experience in project management in a team-based environment.

BUSS214 Business Programming II 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hr Lecture, 2 hr Computer Lab per week.**Pre-requisites:** BUSS111 or CSC111**Assessment:** Assignments; class test and final examination.

Subject Description: The aims of this subject are to provide students with an introduction to a number of fundamental commercial programming techniques that are applicable to the solution of a wide range of typical commercial/business problems; introduction to structured programming; an overview of program quality issues, including design criteria for improving the structure and quality of commercial programs and an introduction to the use of structure charts and pseudocode as formal program design and documentation tools.

BUSS215 Business Programming III 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hr Lecture, 2 hr Computer Lab per week.**Pre-requisites:** BUSS214**Assessment:** Assignments, mid session-test and final examination.

Subject Description: This is the second subject in commercial business programming which introduces the student to advanced programming techniques and requires the student to produce usable programming solutions to realistic business problems. Topics covered include advanced data file processing using sequential, indexed sequential and relative files, hash addressing, B-Tree indexing, sorting, merging, interactive processing, control break processing, character manipulation, subprograms, advanced report generation, embedded SQL, robustness and usability.

BUSS218 Systems Design and Architecture 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial, 1 hour Computer Lab per week.**Pre-requisites:** BUSS211**Assessment:** Assignments, tutorial exercises and final examination.

Subject Description: This subject extends systems analysis and introduces the student to the techniques and technologies

of structured systems design in the post-analysis stages of the Systems Development Life Cycle. It examines the complementary roles of systems analysts, designers, clients and users in traditional Systems Development Life Cycle and Object Oriented development methods. Process and Object methods and models are extended to cover systems design and implementation. Program design is placed in the context of systems design. The student will make use of a Computer Aided Software Engineering (CASE) tool to document design solutions to typical problems.

BUSS308 Computer Systems Management 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 2 hour Tutorial per week.**Pre-requisites:** 6 cp at 300 level.**Exclusions:** Not to count with BUSS208.

Assessment: Develop evaluation grid, case study report, evaluation on case study and peer review reports, final examination.

Subject Description: Students will be introduced to the issues involved in the successful management of a medium sized computer installation in an organisation. Topics covered will include the role of strategic information systems planning; hardware/software specification; tendering procedures; system evaluation and selection; benchmarking; project management (including the management of people); operational management; quality control; system performance monitoring and testing and systems maintenance.

BUSS311 Advanced Database Management Systems 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hr Lecture, 2 hr Computer Lab per week.**Pre-requisites:** BUSS212**Assessment:** Assignments, major assignment and final examination.

Subject Description: This subject provides an overview of the relational data model and relational database management systems followed by comprehensive coverage of some of the advanced topics related to data and database administration, CASE tools, post-relational database systems and recent developments in the areas of online analytical processing, data mining and the World Wide Web (WWW). Discussion of these relatively recent and advanced topics is expected to equip the student to meet the challenges in database management and advanced applications development in contemporary organisations. Students will be presented with opportunities to do hands-on work with appropriate commercial tools.

BUSS312 Distributed Information Systems 6cp**Spring** Dubai On Campus
(Feb-May)**Autumn** Wollongong On Campus**Contact Hours:** Normally 2 hour Lecture, 1 hour Tutorial, 1 hour Computer Lab per week.**Pre-requisites:** 6cp of 200 level BUSS subjects**Assessment:** Assignments and final examination.

Subject Description: This subject examines distributed information systems and data communications technology and their support of organisational objectives, the design of

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networked computer systems, the selection of appropriate hardware and software platforms and the current and future trends in data communications.

BUSS315 Knowledge-Based Information Systems 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Tutorial, 2 hour Computer Lab per week.

Co-requisites: 6 cps at 300-level

Assessment: In-class tests, project, final examination

Subject Description: This subject provides an introduction to the general nature of Knowledge-Based Systems (KBS), appropriate application environments, knowledge acquisition and representation for developing KBS, constraint programming, intelligent agents, web applications, managerial issues in designing KBS, and general methodologies for KBS development. Students will also learn an application of a rule-based Expert System Shell and gain an understanding of the role knowledge-based systems play in business management.

BUSS316 Information Systems Prototyping 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS311 and BUSS214/Not to count with BUSS216

Assessment: Assignments; and final examination.

Subject Description: This subject provides an understanding of the systems development and modification process. It enables students to evaluate and choose an appropriate systems development methodology. It emphasises the factors for effective communication with users and team members and all those associated with development and maintenance of the system. It introduces and describes evolutionary systems development methodologies, and addresses the issues involved in project planning, documentation, management and monitoring of evolutionary development.

BUSS317 Business Programming IV 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 2 hour Computer Lab per week.

Pre-requisites: BUSS214

Assessment: Assignments, major assignment and final examination.

Subject Description: This subject examines the principles, techniques and methodologies for the design of business software systems using visual programming tools and the object-oriented approach. This subject describes the concepts of inheritance, encapsulation, construction, access control and overloading. Students will be provided with both the framework and the building blocks with which they can define and implement objects of their own and use them in conjunction with a visual programming system.

BUSS318 Information Systems Project 6cp

Spring Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hour Tutorial per week

Pre-requisites: BUSS214 and BUSS311

Assessment: Progress report; Presentation; Final Report and Final examination.

Subject Description: This subject examines in detail the principles/techniques of project design and management and the factors to be considered such that a system can be planned, designed, implemented and managed successfully. Topics will include: project management, cost benefit analysis, hardware and software acquisition and systems implementation and maintenance. Students will be expected to utilise these techniques to analyse, design and plan for the implementation and maintenance of systems in a commercial environment. There is a requirement to undertake a group project.

BUSS391 Special Topic in Information Systems 6cp

Spring Wollongong On Campus

Autumn Wollongong On Campus

Summer 2004/05 Wollongong On Campus

Contact Hours: 4 hrs contact per week (seminars)

Pre-requisites: BUSS211 and BUSS212

Co-requisites: 12 cp at BUSS300 level

Assessment: Assignments; Reports; Examination.

Subject Description: In this subject students will undertake a study of research methods or other topic of current interest in Information Systems. Its purpose is to give final year BComm(BIS) students an opportunity to explore in depth, a current and advanced topic in Business Information Systems.

BUSS408 Business Information Systems Honours - Part 1 36cp

Annual Wollongong On Campus

Pre-requisites: Students must have approval from the Head of the Discipline of Information Systems in order to enrol in this subject

Assessment: Research Report; Assignments; Progress Reports.

Subject Description: This subject is specifically for those undertaking an honours program in Business Information Systems who wish to complete the program of study over 18 months. This subject would be followed by BUSS409 in the next Autumn session and together with BUSS409 is equivalent to BUSS410.

BUSS409 Business Information Systems Honours - Part 2 12cp

Autumn Wollongong On Campus

Pre-requisites: Students must have approval from the Head of the Discipline in order to enrol in this subject

Assessment: Research Report; Assignments; Progress Reports.

Subject Description: This subject follows BUSS408 for those who are undertaking over 18 months an honours program in Business Information Systems. This subject together with the subject BUSS408 is equivalent to BUSS410.

BUSS410 Business Information Systems Honours 48cp

Annual Wollongong On Campus

Pre-requisites: Students must have approval from the Head of the Discipline in order to enrol in this subject

Assessment: Research Report; Assignments; Progress Reports.

Subject Description: The minimum entry requirement to the honours program is the completion of a major study in Business Information Systems with results significantly above pass level. Students wishing to proceed to honours should consult the Head or Course Coordinator as soon as their interest in doing so is known. Students will be required to complete satisfactorily BUSS929 as part of the coursework component of their honours program.

BUSS450 Joint Honours in Business Information Systems 48cp

Annual Wollongong On Campus

Pre-requisites: Students must have approval from the relevant Heads in order to enrol in this subject.

Assessment: Research Report; Progress Reports; Assignments.

Subject Description: The entry requirement to the Joint Honours program is similar to the Business Information Systems Honours program above, except that candidates will be permitted to undertake an honours program in Business Information Systems and in a cognate discipline offered by another academic unit/discipline of the University. The coursework component and thesis topic for research must be chosen in consultation with the Heads of both the academic units involved.

COMM100 Introduction to Employment Relations 6cp

Autumn/Spring Wollongong On Campus

Autumn Batemans Bay On Campus

Autumn Shoalhaven On Campus

Autumn Bega/ Moss Vale On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject is offered in two discrete sections. It introduces students to several approaches to understanding employment, the management of labour, and work. It draws on social sciences, behavioural sciences and business sciences, in particular various forms of industrial/employment relations, and human resource management. Section one investigates the importance of context for analysing the factors that determine or influence the nature and organisation of paid work and employment at managerial and non-managerial levels. Section two is an introduction of the key concepts and techniques of contemporary human resource management. Based on an open systems approach to understanding organisations, it examines how these concepts and techniques can be used to manage the processes of organisational entry, exit and job performance.

COMM121 Quantitative Methods I 6cp

Autumn/Spring Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega/ Moss Vale On Campus

Summer 2004/05 Wollongong On Campus

Contact Hours: Autumn/Spring 2 hour Lecture, 1 hour Tutorial; Summer 4 hour Lecture, 2 hour Tutorial.

Subject Description: An introduction to quantitative techniques and their application to business economics. Emphasis will be on statistics and topics will include descriptive statistics, probability, sampling, confidence intervals and hypothesis testing, elementary correlation and regression analysis and the use of computer programs for estimation and analysis.

COMM303 Development of Modern Business 6cp

Not on offer in 2004.

Prerequisites: 72 credit points including all Commerce core subjects

Assessment: Case Study (written report) Essay Examination

Subject Description: The subject traces the evolution of modern business enterprises, particularly in the twentieth century. Emphasis is placed on a comparison of the dynamics of capitalist corporate development in Australia, the United States, Japan and the United Kingdom. Major topics include the effects of external institutional and technological environments on corporate change; changing forms of firm organisation; the role of corporations in an evolving international economy; developing corporate strategy; inter-organisational relationships; and the role of corporations in modern society.

COMM327 Business Innovation, Technology, and Policy 6cp

Autumn/Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial.

Prerequisites: Any 72 credit points of subjects

Subject Description: This integrating subject provides conceptual frameworks in which to think systematically about business innovation, technology and related policy issues. The purpose is to gain a better understanding of the role of innovation-related issues in the context of a creative society such as the mechanics of a creative economy, collateral effects of innovative activities, commercialization of innovations, the importance of price competition and competition through innovation, technological competition, the difference between ideas and human capital, the use of innovation-based classifications of economic sectors, the importance of innovation policies, etc. The subject incorporates elements from a variety of disciplines, including economics, management, and marketing.

COMM328 Contemporary issues in Commerce 6cp

Not on offer in 2004.

Prerequisites: 72 cp including all Commerce core subjects

Assessment:

Subject Description: The aim of this integrating subject is to look at a contemporary issue in the business world from a multi-disciplinary perspective. The specific issue explored

Subject Descriptions

may vary from year to year. The subject encourages students who have majored in a variety of majors to analyse an issue of relevance to the modern business environment.

COMM351 Business Ethics and Governance 6cp

Not on offer in 2004.

Prerequisites: 72 cp

Subject Description: An examination of the central issues in business ethics, covering topics such as the concept of social responsibility, individual and corporate values, models for making ethical decisions, ethics for the employee, the customer, the environment, the community, the government and the multinational context. Class consists primarily of student-centred discussion and experiential activities. Semester is arranged to take students through a reflective, unlearning process.

COMM401 Honours Coursework 24cp

Autumn/Spring Wollongong On Campus

Subject Description: The subject will enable all students doing honours in a single discipline in the Faculty of Commerce to enrol in the same subject. The advanced topics the student studies will depend on their discipline. The Faculty offers honours in the following disciplines: Accountancy, Applied Finance(Planning, Business Information Systems, Econometrics, Economics, Finance, Human Resource Management, Industrial Relations, International Business, Management and Marketing. Students enrolled in this subject will also do COMM402.

COMM402 Honours Research 24cp

Autumn/Spring Wollongong On Campus

Prerequisites: Entry to Honours

Subject Description: The subject is appropriate for students doing honours in a single discipline in the Faculty of Commerce to enroll in the same subject. The Faculty offers honours in the following disciplines: Accountancy, Applied Finance(Planning, Business Information Systems, Econometrics, Economics, Finance, Human Resource Management, Industrial Relations, International Business, Management and Marketing. Students enrolled in this subject will also do COMM401.

COMM403 Joint Honours Coursework 24cp

Autumn/Spring Wollongong On Campus

Prerequisites: Entry to Honours

Subject Description: The subject will enable all students doing honours in two disciplines in the Faculty of Commerce to enrol in the same subject. The advanced topics the student studies will depend on their discipline. The Faculty offers honours in the following disciplines: Accountancy, Applied Finance(Planning, Business Information Systems, Econometrics, Economics, Finance, Human Resource Management, Industrial Relations, International Business, Management and Marketing. Students enrolled in this subject will also do COMM404.

COMM404 Joint Honours Research 24cp

Autumn/Spring Wollongong On Campus

Prerequisites: Entry to Honours

Subject Description: The subject is appropriate for students doing honours in two discipline in the Faculty of Commerce to enroll in the same subject. The Faculty offers honours in the following disciplines: Accountancy, Applied Finance(Planning, Business Information Systems, Econometrics, Economics, Finance, Human Resource Management, Industrial Relations, International Business, Management and Marketing. Students enrolled in this subject will also do COMM403.

COMM405 Joint Honours 24cp

Autumn/Spring Wollongong On Campus

Contact Hours: 6 hours of Seminar (Coursework component 50%).

Prerequisites: Entry to Honours

Subject Description: The subject is appropriate for students doing honours in two discipline, one of which is outside the Faculty of Commerce. The advanced topics the student will study will depend on their discipline. The Faculty of Commerce offers honours in the following disciplines: Accountancy, Applied Finance(Planning, Business Information Systems, Econometrics, Economics, Finance, Human Resource Management, Industrial Relations, International Business, Management and Marketing. Students enrolled in this subject will also enroll in other honours subjects totalling 24 credit points outside the Faculty of Commerce. The thesis will be on a topic relevant to the two disciplines and represent 50% of the honours year.

ECON101 Macroeconomic Essentials for Business 6cp

Autumn/Spring Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega On Campus

Autumn Moss Vale On Campus

Spring (METC) AIT-TAFE On Campus

Autumn Dubai On Campus

(Sept04-Jan 05)

Contact Hours: Generally 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: Macroeconomics develops a student's knowledge of economic theory and the capacity to apply this knowledge to a range of important domestic and international issues. These issues could include taxation reform in Australia, national debt, trade and investment, economic development and growth.

ECON111 Introductory Microeconomics 6cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Spring	Shoalhaven	On Campus
Spring	Batemans Bay	On Campus
Spring	Moss Vale	On Campus
Spring	Bega	On Campus
Intake C	Sydney	Modular
Spring	Dubai	On Campus
(Feb04-May04)		
Spring/Autumn	(METC) AIT-TAFE	On Campus
Session 1	Kuala Lumpur	On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: An introduction to microeconomics and its application to contemporary social and economic problems. Elementary economic theory and the necessary institutional framework will be developed.

ECON121 Quantitative Methods I 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Spring	Wollongong	On Campus
Spring	Shoalhaven	On Campus
Spring	Batemans Bay	On Campus
Spring	Bega	Flexible
Spring	Moss Vale	On Campus
Summer 2004/05	Wollongong	On Campus
Intake A	Sydney	On Campus
Intake A	Sydney	Modular
Intake C	Sydney	Modular
Spring	Dubai	On Campus
(Feb04-May04)		
Summer	Dubai	On Campus
(June 04-Sep 04)		
Autumn	Dubai	On Campus
(Sept 04-Jan 05)		

Contact Hours: Normally 3 hour Lecture, 1 hour Tutorial per week.

Subject Description: An introduction to quantitative techniques and their application to business economics. Emphasis will be on statistics and topics will include descriptive statistics, probability, sampling, confidence intervals and hypothesis testing, elementary correlation and regression analysis and the use of computer programs for estimation and analysis.

ECON205 Macroeconomic Theory and Policy 6cp

Autumn/ Spring	Wollongong	On Campus
Spring	Dubai	On Campus
(Feb04-May04)		

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON101

Subject Description: This unit analyses the major factors which determine the behaviour of the macroeconomy including policy prescriptions. The effects of money and interest, consumption and investment behaviour, monetary

and fiscal stabilisation policies and the balance of payments on aggregate demand are studied. Aggregate supply factors in the form of wages and prices, inflation and unemployment and other macroeconomic controversies are then considered.

ECON207 Economic Policy 8cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject examines the justification for, and the role of, government policy in a market economy. Emphasis will be placed on the Australian government and economy with international comparisons. The issues and topics discussed will include: the economic rationale for government intervention in a market economy; the size of the government sector and its sources of funds; the fiscal relationships between federal, state and local governments; the trade off between economic efficiency and social equity; the economic and social consequences of alternative taxation policies; and the government role in promoting effective market competition.

ECON208 Gender, Work and the Family 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject analyses the roles women and men play in the workforce and within the family. Topics will include: analysis of factors affecting recent trends in female and male labour force participation; gender differences in occupational patterns and earnings; the economics of discrimination; the role of the family in providing education, health care and other goods and services for its members; and the economic determinants of marriage and fertility.

ECON215 Microeconomic Theory and Policy 6cp

Autumn/Spring	Wollongong	On Campus
Autumn	Dubai	On Campus

(Sept04-Jan 05)

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The subject provides further development of topics covered in introductory microeconomics, as well as more advanced topics. Topics that are developed further are demand and supply analysis; consumer choice; theory of the firm; cost functions; market behaviour under alternative market conditions; factor markets, and externalities. New topics not covered in the introductory course include general equilibrium theory and choice under conditions of uncertainty.

ECON216 International Trade Theory & Policy 6cp

Spring	Wollongong	On Campus
Summer 2004/05	Wollongong	On Campus
Spring	Dubai	On Campus

(Feb04-May04)

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON111

Subject Description: This subject is an introduction to international trade theory and international trade policy. It will examine the theory, policies, practices and institutions of

Subject Descriptions

relevance to a country's trade with other nations. Special attention will be given to Australia in the international economy.

ECON221 Econometrics 6cp

Spring Wollongong On Campus

Autumn Dubai On Campus

(Sep 04-Jan 05)

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON121 or COMM121 or STAT131 or STAT231

Subject Description: Students learn to use data to solve real-world problems by estimating economic parameters (such as elasticities, marginal values etc). Students acquire expertise in applying econometric methods, including regression analysis and its extensions, to various types of data. Students learn how to use econometrics to test economic theory, analyse economic behaviour and assist in policy formation. The subject is application orientated and practical work is performed using Windows-based statistical software.

ECON222 Quantitative Methods II 6cp

Autumn/Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject provides an introduction to mathematical techniques useful in business and economics. The main topics include marginal values, average values, elasticities, constrained and unconstrained optimisation, game theory, and the mathematics of finance. The mathematical techniques will be systematically presented and clearly illustrated in representative business and economic models.

ECON230 Quantitative Analysis For Decision Making 6cp

Spring Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay Flexible

Spring Bega Flexible

Spring Moss Vale On Campus

Autumn (METC) AIT-TAFE On Campus

Autumn Dubai On Campus

(Sept04-Jan 05)

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON121 or COMM121 or STAT131 or STAT231

Subject Description: The role of quantitative analysis in the decision-making process. Problem-solving techniques will be studied with emphasis on their practical application. Topics may include: linear programming; integer programming; goal programming; network analysis; systems simulation; decision theory; and inventory and queueing models.

ECON231 Business Statistics and Forecasting 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1hour Computer Lab per week.

Pre-requisites: ECON121 or COMM121 or STAT131 or STAT231

Subject Description: This subject introduces students to the applications of multi-variate statistical analysis to problems in business and economics. These techniques will include multiple regression, discriminant analysis, factor analysis and cluster analysis. The subject also deals with the application of forecasting techniques, including smoothing methods, time series decomposition, and the Box Jenkins approach to problems. The emphasis will be on the use of various relevant computer packages.

ECON251 Industry and Trade in East Asia 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject studies the growth of the major economies in East Asia. It examines Japan, Korea, China, Taiwan & Hong Kong and their history of industrialisation in the post-war period, industrial structure, macroeconomic trends and policies. It examines trade patterns and trade policy, and strategic trade theories and policies. Comparisons of growth paths and the role of government will be made. Trade and investment flows in the Asia-Pacific region are analysed and implications for Australia and the Asia-Pacific Region are emphasised.

ECON301 Monetary Economics 6cp

Autumn Wollongong On Campus

Autumn Dubai On Campus

(Sept04-Jan 05)

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject develops the analysis of macroeconomic policy and public finance begun in the second year. It aims to analyse the working and institutions of the Australian monetary and financial system and markets, and monetary/regulatory policy in the economy. Attention is given to the determination of the money supply and its impact on interest rates, the price level, and the exchange rate.

ECON302 Transition Economics 6cp

Spring Wollongong On Campus

Spring Dubai On Campus

(Feb04-May04)

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON101 and ECON111

Subject Description: Emphasis will be placed upon transition issues arising from the formerly centrally planned economies of Europe and Asia as they have moved towards market oriented economies; developed market economies in Europe as existing and prospective members of the European Union move towards a more advanced stage of trade, investment, and financial integration; developing market economies in East Asia as they attempt to achieve a higher level of economic development.

ECON303 Economic Development Issues 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON101 and ECON111 and any 72 credit points of subjects.

Subject Description: Nation states have attempted to accelerate the rate and influence the pattern of economic growth and development with mixed results. Consequences of economic development have been enormous. Economic Development issues addressed are: relationship between economic growth and development; market and the state; savings, investments and technical change; infrastructure and public goods as well as the role of agriculture; industrialisation; international trade and economic co-operation, and population and human resource development.

ECON305 Economic Policy 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Prerequisites:** ECON205 and ECON215

Subject Description: This subject introduces students to important economic policy issues facing governments in Australia and overseas. It addresses key questions for modern policy makers such as how to respond to market failure, what are appropriate measures to improve the competitive environment, and how can the state reduce income inequality and poverty. The subject encourages students to analyse applied research from the economics and political science literature. Students will have a greater understanding and appreciation of the dilemmas facing government policy makers.

ECON307 International Monetary Economics 6cp

Spring Wollongong On Campus

Spring Dubai On Campus

(Feb04-May04)**Contact Hours:** Normally 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON101

Subject Description: This subject is a study of monetary aspects of international economics. It comprises two parts. In Part A we examine theoretical approaches to the balance of payment and exchange-rate determination. In Part B we analyse selected issues in international monetary economics of topical interest.

ECON308 Labour Economics 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON111

Subject Description: A study of the labour market and the factors influencing the supply and demand for labour will be the basis for the subject. Wages theory will be discussed as well as Australian practice. The effects of changes in technology on the workforce will be discussed as well as ways of accommodating such changes.

ECON309 Environmental Economics 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON111

Subject Description: This subject will provide a comprehensive analysis of environmental issues using both the traditional theory of economic externalities and the newer analysis of ecologically sustainable development. Both approaches will be used to initially evaluate environmental policy in Australia and developing countries. In addition, a component of the course will deal with issues specific to the Illawarra/South Coast Region.

ECON310 Cost Benefit Analysis 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON215

Subject Description: The main objective is to develop theoretical foundations and applied skills in financial, economic, and social evaluation of large public and private sector projects involving priced and non-priced inputs and outputs. Examples from infrastructure, education, health, and conservation projects are used to illustrate the underlying theoretical foundations of cost-benefit analysis and related issues of microeconomics efficiency. Topics covered include: welfare foundations of cost-benefit analysis, the derivation of analytical criteria for investment appraisal; the identification of benefits and costs; shadow prices for imperfect product and factor markets; unpriced goods and services; measurement of externalities; and the incorporation of risk and uncertainty.

ECON311 Natural Resource Economics 6cp*Not on offer in 2004***Pre-requisites:** ECON111

Subject Description: The main objective of the subject is to develop skills in the economic analysis of natural resource problems. The course consists of two broad sections, namely: the generalisation of theoretical frameworks for the utilisation of natural resources; and the application of these theoretical frameworks to the management of specific natural resources and to the formulation of appropriate policies. The topics covered include: optimisation frameworks for renewable and non-renewable resources; models for optimal resource use over time; energy resources; mineral resources; water resources; forestry resources; natural environments; and issues concerning pollution.

ECON312 Industrial Economics 6cp

Autumn Wollongong On Campus

Not offered in 2003**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON111

Subject Description: A study of factors affecting production and productivity, with particular regard for industrial organisation in Australia. The emphasis will be on the industry, the economic sector, and the regional and national organisation of industry, as they affect decisions on prices, employment, investment, innovation, output and income distribution.

ECON315 Applied Economics 6cp*Not on offer in 2004.***Pre-requisites:** ECON111

Subject Description: Microeconomics applied to a variety of topics and social problems. The areas of application studied vary from year to year but include such topics as the economics of health care, education, working women, migration, the arts and crime.

ECON316 History of Economic Thought 6cp*Not on offer in 2004.***Pre-requisites:** ECON205 and ECON215**ECON317 Economics of Health Care 8cp****Autumn** Wollongong On Campus**Contact Hours:** Wollongong: 2 hour Lecture, 1 hour Tutorial per week.**Restrictions:** Not available to Bachelor of Commerce students.

Subject Description: A survey of economic aspects of the Australian health-care system. Topics covered will include the supply and demand for health services, health-care delivery systems, health insurance, program evaluation and medical decision-making. Government policies influencing all aspects of health care will be analysed and evaluated.

ECON318 Economics of Health Care - A 6cp**Autumn** Wollongong On Campus**Autumn** Shoalhaven On Campus**Autumn** Batemans Bay On Campus**Autumn** Bega On Campus**Autumn** Moss Vale On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: A survey of economic aspects of the Australian health-care system. Topics covered will include the supply and demand for health services, health-care delivery systems, health insurance, program evaluation and medical decision-making. Government policies influencing all aspects of health care will be analysed and evaluated.

ECON319 Electronic Commerce and the Economics of Information 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject analyses the impact of electronic commerce on the markets for consumer goods and services and factors of production. Reasons for the dramatic increase in the use of electronic commerce and its effects on consumers, business firms and the wider community will be explored. Special attention will be given to the implications for small and medium-sized firms and the impact of electronic commerce on the globalisation of markets. The subject analyses electronic commerce in the context of the economics of information, technology and transaction costs and investigates the role and value of information in decision making.

ECON320 Economics of Small and Medium Enterprises 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The subject analyses the impact of entrepreneurs/small medium-sized enterprises (SMEs) on important areas of the economy such as innovation, employment creation, trade and investment. The formulation of appropriate public policies with respect to SMEs will also be examined. Recent developments in the economic theory of business enterprises, backed up by case studies of individual firms, industries and countries, will form the basis of the subject. Topics covered will represent a blend of the theory and practice of small business and enterprise development, and will include examining the links between firm size and performance, the distinct roles of different sized firms, and the relationship between firm size and innovation.

ECON322 Mathematical Economics 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON122 or ECON222

Subject Description: This subject is a study of mathematical aspects of microeconomics and macroeconomics. The topics include consumer demand theory, compensated demand functions, production theory, cost functions, market demand and supply functions, models of market structure and macroeconomics of open economy. Mathematical techniques include linear algebra, optimisation, differential and integral calculus. Particular attention will be given to economic policy analysis using mathematical models.

ECON327 Advanced Econometrics 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week..**Pre-requisites:** ECON221 or ECON231 or MARK239

Subject Description: This subject introduces the student to three areas widely used in applied microeconomics and applied macroeconomics including limited dependent and qualitative variables in econometric models and the use of panel data in modelling economic behaviour.

ECON331 Financial Economics 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ECON111 and either ECON121 or COMM121

Subject Description: This subject deals with investment in production capacity, portfolio analysis, debt accumulation, insolvency and liquidation. Optimal control methods are used for analysing the efficient trajectories of capital investment and borrowing. Portfolio choice and producers' choices of activity sets are analysed within a mean-variance expected utility maximisation framework incorporating the concepts of risk aversion, costs of risk bearing and diversification.

ECON332 Managerial Economics & Operations Research 8cp*Not on offer in 2004.***Prerequisites:** ECON121 or COMM121

Subject Description: This subject develops and applies a variety of quantitative techniques to economic and managerial decision-making. It is an extension of ECON 228/230 and covers a wide range of quantitative analyses such as forecasting techniques, Markov process models, PERT, CPM and specialised network algorithms, risk preference analysis, transportation and assignment models and quadratic and nonlinear programming.

ECON333 Conflict and Co-Operation 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 2 hour Tutorial per week.**Pre-requisites:** ECON122 or ECON222.

Subject Description: The subject will introduce students to the study of game theory as a tool for analysing a wide range of situations, particularly in the social sciences. The subject will focus on the application of basic game-theoretic concepts to analyse these situations, and will cover both noncooperative and cooperative games. The latter will include the examination of issues in communitarian economics (such as the economics of organisations like the WTO, the IMF, World Bank, and other NGOs). Students will participate in simple game-playing exercises designed to reinforce and further their understanding of the concepts.

ECON334 Global Economics 6cp*Not on offer in 2004.***Pre-requisites:** ECON101 and ECON111.

Subject Description: This subject introduces students to major contemporary global economic issues such as global economic growth and percapita income: the external debt crisis: integrated international capital-markets; European monetary unification and its potential; free-trade negotiations and the formation of free-trade zones; the transition of centrally planned economies to market economies; and the economic implications of global environmental and resource degradation and the need for international co-ordination and co-operation.

ECON341 Special Topics in Economics-A 8cp**Autumn/Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: Topics for this subject may be drawn from any area of economics which the Head of School considers to be suitable preparation for an undergraduate degree and appropriate to the special interests of students.

ECON342 Special Topics in Economics-B 8cp**Autumn/Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: Topics for this subject may be drawn from any area of economics which the Head of School considers to be suitable preparation for an undergraduate degree and appropriate to the special interests of students.

ECON421 Honours Economics 48cp**Annual** Wollongong On Campus

Subject Description: The coursework comprises: advanced macroeconomic theory; advanced micro-economic theory; and the history of economic thought and methodology. The thesis must be a piece of original research and is evaluated by internal and external examiners.

ECON423 Honours Econometrics 48cp**Annual** Wollongong On Campus**Pre-requisites:** ECON221 ECON327

Subject Description: The course work comprises: advanced macroeconomic theory; advanced micro-economic theory; methodology; and econometric theory. The thesis must be a piece of original research on theoretical or applied econometrics and is evaluated by internal and external examiners.

ECON451 Joint Honours Economics 24cp**Annual** Wollongong On Campus**Pre-requisites:** ECON221 ECON327

Subject Description: The course work consists of components chosen by the Head of the Discipline of Economics from those required of students enrolled in ECON421 Honours Economics, to the value of 24 credit points. The other 24 credit points in another discipline must be in 400-level subjects approved by the relevant Head.

FIN 221 Business Finance I 6cp

Autumn Wollongong On Campus
Autumn Shoalhaven On Campus
Autumn Bega On Campus
Autumn Batemans Bay On Campus
Autumn Moss Vale On Campus
Summer 2004/05 Wollongong On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial 1 hour Workshop per week.

Pre-requisites: ACCY101, ACCY190, or ACCY100 and ACCY102

Exclusions: Not to count with ACCY221 and ACCY241 or FIN241

Assessment: See Subject Outline

Subject Description: An introduction to financial markets and corporate valuation, and a critical examination of the theory and practice of corporate financial management, including the capital structure decision, the capital acquisition/disbursement decision, and the investment decision.

FIN 223 Investments I 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ACCY221 or FIN221**Exclusions:** Not to count with ACCY223**Assessment:** See Subject Outline

Subject Description: An introduction to modern portfolio theory and capital asset pricing. The first part of the course develops asset pricing and investment market behaviour models. It then examines the relevant empirical tests and

Subject Descriptions

applies the models to the problem of measuring risk, market efficiency and portfolio performance; followed by a study of investment management in the social and economic contexts. This part emphasises the role of capital asset markets, interest rates and bonds in financial management.

FIN 226 Financial Institutions 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221 and ECON111

Exclusions: Not to count with ACCY226

Assessment: See Subject Outline

Subject Description: This subject covers the history and development of financial institutions and their current role in national and global financial markets. A distinction is made between financial intermediaries and financial agents. The subject is presented with an Australian/Asian focus. It emphasises an analysis of the interaction between financial institutions within the two regions.

FIN 227 Finance in Small Business 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY227

Assessment: See Subject Outline

Subject Description: The focus of this subject is financial management in small firms in an environment of market imperfections which may adversely affect such organisations. Issues to be discussed include valuation, performance measurement, the 'finance gap' and franchising. The need to modify traditional finance theory when applied to small firms is emphasised.

FIN 241 International Financial Management 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY101, ACCY190, or ACCY100 & ACCY102

Exclusions: This subject is not to be attempted in parallel with ACCY221/FIN221 Business Finance I. Not to count with ACCY241

Assessment: See Subject Outline

Subject Description: International Financial Management is designed to give students an appreciation of and expertise in the use of financial tools in an international context. The subject will cover the techniques of finance and will then relate them to international financial institutions and practices. Throughout the course students will learn to evaluate risk and expected return from international investment markets.

FIN 251 Introduction to Financial Planning 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY100 & ACCY102

Assessment: See Subject Outline

Subject Description: This subject introduces students to the role of the financial planner. The material covered includes an

overview of the financial products available to clients, methods to assess client needs and risk profiles. Financial planning in Australia is subject to particular codes of conduct. These industry standards and the regulatory environment that governs the operation of such advisory services are also presented.

FIN 320 Risk and Insurance 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Prerequisites: FIN221 or ACCY221

Assessment: See Subject Outline

Subject Description: The subject deals with the concepts and technical analysis of risk, risk attitudes and insurance. The content covers protection against portfolio, financial and corporate risk that are part of various types of investment decisions. The analysis covers risk insurance in relation to share portfolio protection, hedging against currency exchange rate movements and loan interest movements.

FIN 322 Business Finance II 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY322

Assessment: See Subject Outline

Subject Description: Advanced aspects of financial management of corporate resource allocations with an emphasis on issues in financial planning and strategy. Topics will include the impact of increasing complexity in the business environment upon financial decisions, the development and use of financial planning models, the costs and benefits of mergers/takeovers and aspects of international financial management.

FIN 323 Investments II 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY223 or FIN223

Exclusions: Not to count with ACCY323

Assessment: See Subject Outline

Subject Description: This subject is at an advanced level. Students are presumed to have successfully completed ACCY221/FIN221 Business Finance I and ACCY223/FIN223 Investments I and to be knowledgeable in the material covered in those subjects. Building upon that base, advanced issues in modern investment management, portfolio theory, capital and derivative markets are discussed from a global perspective.

FIN 324 Financial Statement Analysis 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY324

Assessment: See Subject Outline

Subject Description: This subject develops knowledge and skills in the principles and techniques of analysis of accounting information contained in financial statements. The

emphasis is on practical application of these skills at an advanced level. Students will undertake a major project which will utilise and extend the skills and knowledge gained during the course. The subject will involve an exploration of the many and varied sources of information used in developing financial analyses of firms (companies and other entities).

FIN 325 Banking Practice 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY325 and ACCY201

Assessment: See Subject Outline

Subject Description: Banking Practice is a comprehensive subject in banking that integrates with both the finance and accounting specialisations. It combines information on management practices and operations of banks. The subject involves in depth discussions and analysis of banking practices within the Australian and international framework.

FIN 328 Retirement and Estate Planning 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221/FIN221 & FIN251

Exclusions: Not to count with ACCY328

Subject Description: The subject will provide an overview of the procedures and theory of retirement and estate planning. It will discuss the goals and objectives of retirement planning with a view to maximisation of the benefits accruing to the retiree. The subject will also provide a comprehensive overview of superannuation and the implications of superannuation strategies.

FIN 329 Real Estate Planning 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221/FIN221 & FIN251

Exclusions: Not to count with ACCY329

Subject Description: Real estate planning focuses on the criteria involved in property planning. The subject entails comprehensive discussions on issues such as the financing (underwriting) of residential, commercial and income properties, proposed projects, real estate capital markets and securities, legal aspects of real estate planning, the various types of mortgage available, residential financial analysis, the various types of risks involved and the disposition and renovation of real estate.

FIN 351 International Business Finance 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY351

Assessment: See Subject Outline

Subject Description: This subject analyses financial markets in the international sphere, concentrating on the Australian/Asian regions. The subject explores the concepts and relationships linking international financial markets within

the region and the operation of Australian firms in those markets. An introduction to international finance markets theory covers such issues as de-regulation of Australian banking and the Eurofinance market, the pricing of foreign exchange, the international financing decision, foreign exchange and interest rate risk management.

FIN 352 Critical Perspectives in Finance 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221 and 12 additional cp from Schedule C-9

Exclusions: Not to count with ACCY352

Assessment: See Subject Outline

Subject Description: This subject approaches finance unconstrained by the strict neo-classical economic assumptions. It examines the behavioural, social, critical, historical and philosophical aspects of finance. It approaches real world problems of finance in practice and theory. An interdisciplinary approach is adopted, drawing on concepts and work in those disciplines which directly bear on the behavioural and social environments.

FIN 353 Global Electronic Finance 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY353

Assessment: See Subject Outline

Subject Description: This subject will provide a hands-on practical training and development of some of the theoretical and professional issues of Internet based technologies that enable and support global electronic finance. The focus will be on the application of leading edge Internet-based (client server) technologies in the design and implementation processes of Electronic Trading applications. Some of the leading implementations of Electronic Trading Systems, such as: the Australian Stock Exchange (ASX) and the New York Stock Exchange (NYSE) will be examined. The legal, control and security aspects of global electronic finance will be examined as well.

FIN 359 Selected Issues in Finance 6cp

Not on offer in 2004.

Pre-requisites: ACCY221 or FIN221

Exclusions: Not to count with ACCY359

Subject Description: The subject will examine selected topics in the areas of finance and/or investments. Subjects examined will be topical issues and problem areas in the disciplines and will change from year to year.

FIN 422 Investment Analysis 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY422

Assessment: See Subject Outline

Subject Description: An in-depth study of capital investment decision analysis. The theoretical bases of net present value

Subject Descriptions

and internal rate of return selection criteria. The application of investment selection criteria under diverse conditions such as capital rationing, mutually exclusive choice situations, buy/lease decisions, fluctuating rates of output and inflation. The incorporation of risk into capital investment decision analysis, including the application of capital asset pricing models to investment evaluation.

FIN 423 Investment Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY423

Assessment: See Subject Outline

Subject Description: The subject examines some advanced topics in the modern theory of optimal investment decision-making, portfolio theory, capital and derivative markets. The subject will explore areas including; market efficiency models in valuing portfolios and securities, bond analysis, portfolio management and performance evaluation. The subject will provide a theoretical framework within which all derivative securities can be valued and hedged and also examine the way they are traded.

FIN 424 Corporate Financial Information Analysis 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY424

Assessment: See Subject Outline

Subject Description: A survey of methods for the appraisal and prediction of corporate financial performance from such publicly available information as accounting numbers, industry and economic statistics, and stock market data. Equal emphasis is placed upon the development of theoretical constructs, and appraisal of the results of empirical research, especially Australian studies.

FIN 425 Banking Theory and Practice 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week..

Exclusions: Not to count with ACCY425

Assessment: See Subject Outline

Subject Description: This subject focuses on accounting aspects of the practices and operations of banks and other financial institutions. It entails comprehensive discussions on issues that are commonly involved within the banking environment such as the regulatory structure, the cheque clearing system, risk management, lending issues, capital adequacy analysis, and the latest information technology within the banking world.

FIN 426 Studies in Business Finance 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY426

Assessment: See Subject Outline

Subject Description: Contemporary business finance theory, including option pricing theory, arbitrage pricing model, bond swapping and bond immunisation.

FIN 427 Small Business Finance 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY427

Assessment: See Subject Outline

Subject Description: Two major problems account for the majority of small business failures. These are managerial problems and financial limitations. Both are intertwined. The material in this subject covers the sources, uses and management of funds from pre-purchase to public listing. For example, common errors in the financial management of small firms include a lack of adequate control systems for cash and inventory management, accounts receivable and payable, credit management etc. Financial decisions involve complex issues that have both theoretical and applied components that will be discussed in some detail.

FIN 428 Multinational Financial Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY428

Subject Description: The role of multinationals in international investment; aspects of the international monetary system; Euromarkets; foreign exchange markets; internal and external exposure management techniques; currency futures and options; swaps; financing MNC investment; MNC investment decision making; political risk analysis; international taxation.

FIN 487 Special Topic in Finance 6cp

Autumn/Spring Wollongong On Campus

Contact Hours: 2 hour Seminar per week.

Exclusions: Not to count with ACCY487

Subject Description: This subject provides an opportunity to study a topic of research interest within the theory and application of finance as it relates to (i) corporate finance and (ii) investments. The research will be completed under staff supervision and culminates in the production of a written report.

FIN 491 Honours Finance 48cp

Annual/Spring Wollongong On Campus

2004/Autumn 05

Exclusions: Not to count with ACCY491

Subject Description: The subject is designed around coursework and a research essay. There will be a core of coursework comprising accounting and finance theory, research methods and investment analysis. A Major research essay will report the results of a research study undertaken by candidates under supervision. In addition there will be some elective coursework study in a program approved by the subject co-ordinator or Head of Discipline.

FIN 492 Joint Honours Finance 24cp

Annual Wollongong On Campus

Subject Description: This subject will enable the School of Accounting and Finance to offer joint honours with other disciplines within the Faculty and wider university. This should appeal to those students who wish to combine aspects of 2 different disciplines when undertaking an honours program

and will help to strengthen strategic links between the School and other discipline areas within the university.

MARK101 Marketing Principles 6cp

Autumn	Wollongong	On Campus
Spring	Wollongong	On Campus
Spring	Shoalhaven	On Campus
Spring	Batemans Bay	On Campus
Spring	Bega	On Campus
Spring	Moss Vale	On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Exclusions: Not to count with MARK213, MARK293 or MGMT213

Subject Description: The subject will include the following: concepts and tools for analysing marketing strategies; evaluating the marketplace for opportunities; analysing the marketing environment; researching and selecting target markets; determining the consumer's needs; evaluating the marketing mix in terms of price, product, place and promotion. Aspects of international marketing, services marketing and social responsibility will also be taught.

MARK213 Marketing Principles 6cp

Spring/Autumn	Wollongong	On Campus
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Exclusions: Not to count with MARK101

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The subject examines marketing's role in the economy and the nature of marketing systems. After considering the role of the marketing function in the organisation, the marketing decision process is examined. The identification of market opportunities, the selection of target markets from market segmentation, and buyer behaviour is covered. Marketing mix decisions are dealt with in the context of the marketing program.

MARK217 Consumer Behaviour 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Bega	On Campus
Autumn	Moss Vale	On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Consumer Behaviour involves gaining a greater understanding of the consumers as individuals by studying perception, learning and memory, motivation and values, personality, lifestyles, attitudes and attitude change. Additionally the content of this subject focuses upon consumers as decision makers, involving an examination of the entire purchase process. Other areas of interest include household and organisational decision making, and the influence of culture on consumption.

MARK239 Information For Marketing Decisions 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON121 - may be waived for non-Commerce students

Exclusions: Not to count with ECON231

Subject Description: Four main topic areas will be covered: 1. Working with marketing-related information, i.e. data either resulting from marketing and sales activities or which can be obtained from other sources such as the World Wide Web; 2. The use of research to facilitate decision-making (an introduction to the market research process and methods); 3. The analysis of different types of quantitative marketing data (market analysis, forecasting, and introductory statistical analysis); 4. The use of computer programs to manage and analyze marketing information (i.e. databases, spreadsheets, and statistics packages).

MARK240 Marketing and Consumer Behaviour 6cp in East and South East Asia

Autumn	Wollongong	On Campus
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Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Perhaps the most spectacular development and growth recently in international business is the shift in the world economy's focus to East and South-East Asia (ESEA). Given the importance of international marketing within this geographical region, the purpose of this subject is to present various concepts and tools for analysing marketing and consumer behaviour strategies in ESEA. Specifically, the focus of this subject will be on various ESEA countries or strategic locations, considering eight influencing factors on marketing and consumer behaviour: geographical forces; infrastructure development; the political system; the economic system; the social/cultural system; the education system; consumption patterns; and, the macro marketing mix.

MARK270 Services Marketing 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Batemans Bay	Flexible
Autumn	Bega	Flexible
Autumn	Moss Vale	On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: This course is designed to provide an in-depth analysis of the problems facing services marketing managers. Through lectures, class discussion, readings and case analysis, students should develop insights concerning the unique characteristics of marketing in the services sector. Each week students will be required to present their solutions to the questions handed out at the end of the previous lecture. These questions will be based on readings from the required text and articles from leading services marketing journals.

MARK301 Marketing on the Internet 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** (MARK101) or (MARK213) or (MARK293)

Subject Description: This subject deals with the use of the internet to improve and/or extend marketing operations in organisations. It covers a basic foundation of internet technology with consumer behaviour, network values and a review of applications of the internet to market strategy and tactics. The potential of the internet to add value to achieve competitive advantage is a key focal point.

MARK317 Business to Business Marketing 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** (MARK101) or (MARK213) or (MARK293)

Subject Description: Business-to-business (B2B) marketing has emerged as a separate area of study in the broader field of marketing because of its significant differences from consumer marketing. These differences have led to the need for specialised knowledge of the operation. This subject is designed to familiarise students with the critical issues surrounding business markets in the contemporary business world. Topics include: organisational buying behaviours, strategies, global business markets, segmenting, targeting and positioning.

MARK319 Applied Marketing Research 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** (MARK101 and MARK239) or (MARK213 and MARK239) or (MARK293 and MARK239)

Subject Description: This subject will focus on the practice of marketing research as it is applied within organizations, such as market research companies, and will build on the material introduced in MARK 239. The emphasis will be on research which is designed and conducted specifically to meet the information needs of clients. It will cover the market research process from initial client consultation through to the reporting of research findings. The topics covered will include: an introduction to research methodology, the design of research studies to meet client needs, the use of secondary data sources, qualitative research methods (i.e. focus groups, in-depth interviewing, and projective techniques), experiments and market testing, the design and management of surveys (including practical sampling and questionnaire design), and the analysis of survey data.

MARK333 Advertising and Promotions Strategy 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** (MARK101) or (MARK213) or (MARK293)

Subject Description: Advertising & promotions are often the most visible aspects of a company's marketing efforts, be they television advertisements, radio spots, magazine ads, or sales promotions. This subject aims to develop your appreciation of the role that integrated marketing communications plays in an ever increasingly competitive marketplace. By examining the goals, approaches to and the costs incurred by the use of the various communication forms that companies employ, it is expected that students will be

able to develop an integrated communications campaign and also be able to critically evaluate them. A key part of this course will be the development of a promotional plan allowing students a hands on opportunity at media planning and an opportunity to create advertisements of ones own.

MARK343 International Marketing 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** (MARK101) or (MARK213) or (MARK293)

Subject Description: The principal aim of the subject is to analyse the global marketing environment and develop appropriate international marketing strategies. The content will include: socio-economic, legal, political, financial and cultural factors affecting international marketing operations; analysing the profiles of selected regional markets and strategic options for entry and expansion in those markets; international marketing research methods and data analysis techniques; international marketing mix decisions; and contemporary issues in multinational marketing.

MARK344 Marketing Strategy 6cp**Spring** Wollongong On Campus**Spring** Shoalhaven On Campus**Spring** Batemans Bay Flexible**Spring** Bega Flexible**Spring** Moss Vale On Campus**Contact Hours:** Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: (MARK101 plus 3 Marketing subjects from the Commerce C-8 schedule) or (MARK213 plus 3 Marketing subjects from the Commerce C-8 schedule) or (MARK293 plus 3 Marketing subjects from the Commerce C-8 schedule)

Subject Description: This is the 'capstone' unit in the marketing major. As such it is designed to integrate skills and knowledge in a number of other business disciplines. It will draw heavily on the areas of not only marketing theory and market research methods but also economics, finance, managerial accounting and management theory. It is designed to develop analytical skills and diagnostic ability for the proposal, implementation and control of alternative marketing strategies and plans.

MARK356 New Product Marketing 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** (MARK101) or (MARK213) or (MARK293)

Subject Description: New Product Marketing covers issues related to the development and marketing of new products. Topics include: the role of new products in the success of organisations the new product development process marketing mix issues concerned with new products organisation and management of new product development processes diffusion of new products new service development functions of product managers

MARK359 Sales Management 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** (MARK101) or (MARK213) or (MARK293)

Subject Description: The subject covers key areas of sales management including: relationship to wider context of marketing practice, conceptual and behavioural issues, organisational context, motivation, selection & training, motivation, compensation and incentives, approaches to evaluation and control.

MARK393 Special Topic in Marketing 6cp

Spring/Autumn Wollongong On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Selected issues in marketing. Enrolment is subject to approval by the Head of the School

MARK394 Special Topic in Marketing B 6cp

Spring/Autumn Wollongong On Campus

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: A selected issue in Marketing, involving an individual case analysis or business project. Enrolment is subject to the approval of the Head of School. The subject is taken only under special circumstances as a substitute for an approved subject under the Marketing major or double major schedule.

MARK395 Tourism Marketing 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MARK101

Subject Description: This subject introduces, discusses and analyses issues unique to the marketing of tourism products. The focus of this subject is the application of marketing principles and theory in the development of strategic marketing plans for tourism products. The application of strategic tourism marketing planning to the destination, accommodation and tour operator sectors of the tourism industry at the regional, national and international level are analysed. In addition, the subject identifies and discusses contemporary issues in tourism marketing including the impact of e-commerce, database marketing and environmental based tourism.

MARK397 Retail Marketing Management 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: (MARK101) or (MARK213) or (MARK293)

Subject Description: Retail Marketing Management will include a background to retailing, the scope of retailing, retailing strategies, merchandise and store management. Additionally topics such as location, non-store retailing, human resource management, logistics, promotion, pricing, customer service and store layout are also studied. Particular emphasis will be placed on case analysis in order to bring as much of the 'real world' as possible into the classroom.

MARK428 Honours Research Project 24cp

Annual/Spring Wollongong On Campus

Pre-requisites: Normally a minimum of 50% of 200-300 level specialisation subjects achieved to credit level or higher plus no subject failures.

Subject Description: A research topic undertaken by BCom(Hons) students, requiring the candidate to undertake a

substantial piece of research in a theoretical and/or practical applicational area of marketing. The topic must be approved by the Head of the School.

MARK430 Advanced Topics in Marketing 24cp (Honours)

Spring Wollongong On Campus

Annual Wollongong On Campus

Pre-requisites: Normally a minimum of 50% of 200-300 level major subjects achieved at credit level or higher plus no subject failures

Subject Description: A course of study prescribed by the Head of School, consisting of 4x300/900-level subjects which reflect the student's area of research. This subject is available to BCom(Hons) students.

MARK450 Joint Honours in Marketing 48cp

Annual Wollongong On Campus

Pre-requisites: Bachelor degree with a major or joint major in Marketing, and approval of the Head of School, Management, Marketing and Employment Relations. Normally students will have achieved a credit level or higher in at least 50% of their 200/300 level specialisation subjects.

Subject Description: The Marketing component of the subject will consist of coursework and a research thesis in a particular area of Marketing, such as Marketing Strategy, Consumer Behaviour, Services Marketing, International Marketing, New Product Marketing, Electronic Commerce, Business to Business Marketing, Marketing Research, Retail or Sales Management. The other component to be determined by the relevant discipline within the Commerce Faculty.

MGMT102 Business Communications 6cp

Autumn/Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The subject addresses, in turn, learning styles and learning processes; informal networks; ways of finding information in an organisation; diffusion of innovative ideas and practices; the context for communication formed by culture, sense of identity, and community membership; status, power, and persuasion strategies; culture and gender differences; communication between technical and nontechnical people; framing criticism and interpreting stories to promote learning in the organisation; facilitating teamwork and meetings; and integrating aspects of formal and informal communication to obtain a job or make a project work.

MGMT110 Introduction to Management and Employment Relations 6cp

Autumn/Spring Wollongong On Campus

Autumn Batemans Bay On Campus

Autumn Shoalhaven On Campus

Autumn Bega On Campus

Autumn Moss Vale On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The subject examines a range of topics relevant to managers including: teams, leadership, decision making, motivation, strategy, business ethics and

Subject Descriptions

interorganisational relations (eg networks and strategic alliances). A number of themes are addressed throughout the subject such as diversity (gender and cross-cultural influences), power and control, and organisational learning. Organisational learning is seen as one of the key challenges facing managers in the next millennium.

MGMT142 Industrial Relations A 6cp

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The employment relationship is studied in terms of the influence of social, economic, political and legal environment and the power resources of the actors and others who seek to influence employment. The organisation and policies of the major participants in the system are analysed in both historical and contemporary settings.

MGMT200 Management and Electronic Business 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: Must have completed a minimum of 48 credit points of subjects from the Commerce, Information Technology or Engineering schedules.

Subject Description: This subject identifies key management issues arising from the use of e-commerce in organisations and across organisations and in different industry sectors. It critically examines how e-commerce will impact across areas such as information and knowledge management, decision making, teamwork, communication, including the building of trust based relations across a complex array of organisational contexts. The subject will examine the different types of relationships, both internally and externally to the organisation, emerging from the e-commerce revolution. It will consider the 'new economy thesis' as it relates to e-commerce, and the managerial choices and strategies arising from such developments.

MGMT201 Organisational Behaviour 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MGMT110 or PSYC351

Subject Description: The subject examines aspects of the Behavioural Sciences which are relevant to an understanding of human behaviour in work organisations. These will include: topics relevant to the understanding of the behaviour of individuals within work settings; topics relevant to the understanding of large organisations in their totality and studies of the behaviour of individuals and groups within complex organisations combining insights from conflict, co-operation, competition, power, leadership and organisational culture and change.

MGMT205 Recruitment & Selection 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MGMT206 or MGMT398

Subject Description: This subject examines the environment and process of recruitment and selection. Recruitment strategies are described and assessed from the perspective of the organisation and the individual. In particular, a range of personnel selection techniques are examined in relation to reliability, validity, fairness and applicability. Also a range of practical skills in designing personnel selection techniques are developed.

MGMT206 Managing Human Resources 6cp

Autumn Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega On Campus

Spring Moss Vale On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MGMT110

Exclusions: MGMT398

Subject Description: This subject is an introduction to HR management. The subject is concerned with the concepts, techniques and activities involved in managing the flow of people through work organisations. The subject focuses on facilitating the acquisition and development of staff, positively influencing their job performance, and managing the processes of staff retention and turnover.

MGMT215 Small Business Management 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ACCY101 or ACCY100 & ACCY102

Subject Description: Smaller enterprises are becoming increasingly important to the economic well being of many nations. This subject gives students an opportunity to develop an awareness of the role of the small enterprise in the economy and society, and the key factors involved in their management. The subject is oriented at the study of smaller enterprise rather than training the student to start and manage a small firm itself.

MGMT218 Competitive Analysis 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: ECON111

Subject Description: This subject develops models and techniques for measuring and understanding the complexity of competition. Case studies and empirical analysis are used to show how firms can analyse its industry, understand its competitors and its own position, and how this might influence its business strategy. Topics include: Structural analysis of industries; Competitive strategies/framework for analysis; Development of generic strategies; Strategy towards buyers/suppliers; Strategy in different industrial environments; Strategic decisions/competitor analysis; Strategy in a multinational competitive environment.

MGMT220 Organisational Studies 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT110 or PSYC351

Subject Description: This subject examines the structural characteristics of organisations in their environments and the different perspectives from which structures and environments can be understood to affect organisations members and organisational performance. Topics include: organisational structure; organisational size and relationships; technology, organisation and control; bureaucracy and professionalism; organisational change and evolution; organisational identity; organisational ethics; language and the organisation.

MGMT240 Industrial Relations B: Wage Determination 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Exclusions:** Not to count with ECON140, MGMT140 or ECON240

Subject Description: This subject examines principles and processes of wage determination. Special emphasis is placed on the development of the Australian arbitration system and contemporary social and economic factors influencing wage determination.

MGMT243 Work and Employment Relations 6cp**Autumn/Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Exclusions:** Not to count with ECON243

Subject Description: This subject will reflect the widening perceptions of industrial relations and human resource management by introducing students to the field of Employment Relations by which is meant the study of how the conflictual relationship between employers and employees, the development of human resource policies and the influence of law all inter-act to shape relations between management and labour.

MGMT255 Inventory Management 6 cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** 12 credit points at 100 level – commerce subjects

Subject Description: This subject focuses on models and techniques that operations managers use to diagnose and evaluate operational performance, and make short-term and long-term decisions. Introduces, through lectures, computer exercises, and case discussions, various descriptive and decision-support models for inventory management, construction and analysis of mathematical models used in the design and analysis of inventory systems, as well as, deterministic and stochastic demands and lead times, and optimality of (s, S) policies for multiproduct and multi-echelon systems are also covered.

MGMT300 Innovation and Electronic Commerce 6cp**Spring** Wollongong On Campus**Exclusions:** Not to count with COMM300

Subject Description: The subject will provide training and development on some of the theoretical and professional issues involved in using the Internet for product and process innovation. The focus will be on the strategic implications for electronic commerce as a source of competitive advantage. The application will concentrate on the use of the Internet as a strategic marketing tool but will also examine it as a source of information which may be exploited for both product and process innovation. The subject content will have an international focus by exploring the use of the Internet as a source of competitive advantage within the international business context.

MGMT301 Managing Across Cultures 6cp**Autumn/Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject examines how to manage effectively across cultures in international business. It seeks to integrate theory with practical application through an interactive teaching delivery achieved through active class participation, role-plays and simulated business situations. The subject will focus on the challenges presented by culture in international business and how to manage them. On successful completion of this subject, students should have an appreciation and knowledge of managing across cultural boundaries in international business.

MGMT302 Business In Europe 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: The business environment in Europe Europe in the world European markets: problems and prospects; The development and importance of the EU Eastern Europe and the enlargement of the EU: opportunities and constraints. The EU, the manager and the firm: entering EU market; competition policy in Europe: implications for the firm and the manager; the common agricultural policy: implications for the firm and the manager; human resource issues in the European context; corporate strategy in the European context.

MGMT303 Development of Modern Business 6cp**Contact Hours:** Not on offer in 2004**Pre-requisites:** MGMT110 or ECON111

Subject Description: The subject traces the evolution of modern business enterprises, particularly in the twentieth century. Emphasis is placed on a comparison of the dynamics of capitalist corporate development in Australia, the United States, Japan and the United Kingdom. Major topics include the effects of external institutional and technological environments on corporate change; changing forms of firm organisation; the role of corporations in an evolving international economy; developing corporate strategy; inter-organisational relationships; and the role of corporations in modern society.

MGMT306 Business In Australia 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Subject Description: This subject provides students with an introduction to conducting business in Australia. It examines the nature of business in Australia at the government, industry, firm and individual levels. It explores the political, legal, economic, and socio-cultural aspects of business in Australia. It also examines the strategy and operations of several leading local and overseas firms operating in Australia. It aims to provide students with an interesting and practical understanding of Australian business and is also a good introduction to the realities of business.

MGMT308 Introduction to Management For Professionals A 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Restrictions: This subject is not available to Commerce students. Students from other Faculties other than Science require approval of the subject coordinator.

Subject Description: This subject gives an introduction to the environment of the business enterprise and key managerial concepts and techniques. Topics to be introduced include: the environment and the business enterprise, managerial decision-making, planning finance and costs, markets and marketing, technology management; competitive strategy; operations management and project management.

MGMT309 Supply Chain Management 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** 12 credit points at 200 level

Assessment: Individual case study 30%, Group work 20%, Final examination 50%.

Subject Description: This subject provides an overview of key logistics and supply chain management concepts. Emphasis is given to such areas as systems analysis, trade-off analysis, inventory management, transportation management, warehousing and storage, third-party logistics providers, and general theoretical underpinning of supply chain.

MGMT310 Introduction to Management For Professionals B 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.

Restrictions: This subject is not available to Commerce Students

Subject Description: Same course content as MGMT308, but with additional coursework, case studies and assignments.

MGMT311 Management of Change 6cp**Spring** Wollongong On Campus**Prerequisites:** MGMT110 or PSYC351

Subject Description: This subject deals with management of change in organisations. Topics include: sources of change, resistance to change, coping with change, organisational values, cultures and structures, technology and change, leadership and change, models of change, power and politics. Emphasis is place on the application of theory to case study examples.

MGMT314 Strategic Management 6cp**Autumn** Wollongong On Campus**Autumn** Shoalhaven On Campus**Autumn** Batemans Bay On Campus**Autumn** Bega On Campus**Autumn** Moss Vale On Campus

Contact Hours: Normally 2 hour Lecture, 1 hour Tutorial per week.

Pre-requisites: MGMT110 or PSYC351 plus MARK213 or MARK101 or MGMT218 or MGMT220

Subject Description: The subject deals with policy formulation and planning functions in the business enterprise. Topics include: Business mission; Customer and competitor analysis; Industry analysis; Environmental analysis; Strategy and organisation; Alternative business strategies. Stress will be laid on the process by which opportunities and threats to the business enterprise are recognised and evaluated, and on the strategies required to meet these.

MGMT316 Operations Management 6cp**Spring** Wollongong On Campus**Prerequisites:** ECON121 and ECON111

Subject Description: A study of the different types of production and operations and their implications for management - including an overview of capacity, facility and layout planning, problems of job design and work measurement, production scheduling, inventory and quality control and management of the conversion process in a time of change.

MGMT321 Occupational Health and Safety Management 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT398 or MGMT206 or PSYC351

Subject Description: This subject aims to give students a critical introduction to the broad subject of Occupational Health and Safety Management (OHSM) and to examine in detail some of the specific theoretical and practical issues related to the topic. Under the broad rubric of OHSM, there are a number of competing perspectives, views and voices. This subject will not privilege one model over another. Rather, it will present some of these competing views in a manner that will require individual students to exercise their critical faculties and develop their own, theoretically informed approach to the practical management of OH&S.

MGMT322 Training & Development 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT398 or MGMT206 or PSYC351

Subject Description: This subject provides students with an understanding of key concepts and practical approaches to the development of people in organisations. Topics include: theories and models of learning; job analysis; identification of training needs; training delivery forms and their selection; skills development and training; multi-skilling and flexibility; management development; succession planning; national and international frameworks of training; competence-based approaches; organisational learning and the learning organisation; organisational development; evaluation of training and development.

MGMT328 Transport Logistics Management 6cp**Spring** Wollongong On Campus**Prerequisites:** 12 credit points at 200 level**Assessment:** Assignment 1 20% Assignment 2 30% Final examination 50%

Subject Description: This student aims to provide a study of management of systems related to the transportation of products and services to the market. Topics will include quality and service to internal and external customers, analysis of locations for procurement, marketing and distribution. Strategic planning of transportation systems within and outside procurement locations with a strong bias towards supply chain management will be the focus of this subject. The role of marketing and IT, and in particular, information flows, will be crucial issues in this rapidly changing area. The trend towards outsourcing of transport logistics management will also be a major discussion topic. Outsourcing is a key strategic consideration that appears to be leading to 'one stop shopping' by the formation of companies who specialise in the core business of transport logistics.

MGMT332 Enterprise and Innovation 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** ACCY101 or ACCY100 & ACCY102 plus MARK213 or MARK101

Subject Description: True Entrepreneurship and Innovation are key to the future economic development of Australia. The innovation and entrepreneurial processes are important for Small to Medium Enterprises (SMEs) and large organisations. Students will learn how to differentiate between a good idea and a real business opportunity. A key part of this subject is the development of a realistic written business plan for an innovative business opportunity and its presentation via an action learning process utilising teams.

MGMT340 Comparative Studies in Industrial Relations 6cp*Not on offer in 2004***Exclusions:** Not to count with ECON340**MGMT341 International and Comparative Employment Relations 6cp****Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Exclusions:** Not to Count for credit with ECON340 and COMM341

Subject Description: This subject integrates the traditional industrial relations and human resource management approaches, to focus on the 'global shifts' in industry that are transforming employment relations structures and practices in many countries. It reviews the debates linking these with national competitiveness.

MGMT342 Research Topics in Industrial Relations 6cp**Autumn** Wollongong On Campus

Subject Description: This subject presents a multi-disciplinary overview of issues arising from the effects of gender on, and within, the workplace and the labour market. It addresses a range of concepts and methods necessary for understanding the position of women and men at work, both as workers and managers.

MGMT348 Employers and Industrial Relations 8cp**Autumn/ Spring** Wollongong On Campus**Autumn** Shoalhaven On Campus**Autumn** Batemans Bay On Campus**Autumn** Bega On Campus**Autumn** Moss Vale On Campus**Contact Hours:** Normally 2 hour Lecture, 1 hour Tutorial per week.**Exclusions:** Not to count with ECON348

Subject Description: The objective of this subject is to develop an understanding of the pressures and constraints on employers/managers, and the way these influence strategies in the control and administration of the employment relationship. This requires a critical analysis of various theories and styles, as well as practical exercises and evaluation of current trends. The influence of product, labour and financial markets on the strategies and choices will be examined.

MGMT350 Total Quality Management 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT110 plus ECON121

Subject Description: The aim is to provide an introduction to the principles and tools associated with the management philosophy and technique called "Total Quality Management" (TQM). As a means of promoting critical analysis of this management philosophy, and skill development in the use of this technique, students will perform significant group work within the subject. This form of simulation of actual operational TQM practice, will require the students to apply TQM tools to a real operation, wherein, they will identify, analyse and nominate improvements to the quality systems of an organisation.

MGMT352 Negotiation, Advocacy and Bargaining 8cp**Autumn/Spring** Wollongong On Campus**Exclusions:** Not to count with ECON352

Subject Description: Introduces students to theories, concepts and techniques for developing and evaluating strategies and tactics for advocacy before industrial tribunals and negotiation at the workplace. Students will be assisted to develop a range of practical skills and familiarity with procedures through case studies and role playing, as well as a conceptual framework in which to analyse the role of different advocacy and negotiating strategies.

MGMT370 Project Management 6cp**Autumn** Wollongong On Campus**Prerequisites:** MGMT110 plus 6 cp from 200 MGMT subject

Subject Description: An overview of the major elements of project management: conception and planning, scheduling, budgeting, risk management, managing the project team and implementation. Other topics include projects and strategy, dealing with contractors and clients and managing international projects.

MGMT389 International Business Management 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT110 AND MARK213 or MARK101 OR MGMT218

Subject Description: This subject deals with the international business environment and the key issues involved in operating in international and global markets. The international and global business environment, entry modes, global strategies, functional strategies and the management and control of international/global operations are covered. On completion of this subject, students should have an understanding of international business and be able to apply key concepts in analysing and developing international business strategies.

MGMT392 Case Study 12cp**Annual** Wollongong On Campus**Pre-requisites:** MGMT398 & MGMT218

Subject Description: A study of a management problem arising from the experience of an organisation. Enrolment is subject to the approval of the subject coordinator.

MGMT393 Special Topics A 6cp**Autumn/Spring** Wollongong On Campus**Pre-requisites:** 12 cp from 100/200 level MGMT subjects

Subject Description: Enrolment is subject to the approval of the subject Coordinator. Selected issues in general management and in the various functional areas of management.

MGMT398 Human Resource Management 6cp**Annual** Wollongong On Campus**Spring** Shoalhaven On Campus**Spring** Batemans Bay On Campus**Spring** Bega On Campus**Spring** Moss Vale On Campus**Contact Hours:** Wollongong 2 hour Lecture, 1 hour Tutorial per week.**Pre-requisites:** MGMT110**Exclusions:** MGMT206

Subject Description: This subject is concerned with concepts, techniques and activities involved in the managing the flow of human resources through organisations. Emphasis is placed on understanding the techniques of contemporary HRM that can be applied in organisations to facilitate the acquisition and development of staff, to influence positively their job performance, and to manage the processes of staff turnover and retention. The theoretical foundations and practical application of these techniques is emphasised.

MGMT404 Honours International Business 48cp**Annual** Wollongong On Campus**Pre-requisites:** Normally a credit level average of 200 and 300 level subjects.

Subject Description: This subject comprises coursework, as approved by the Head of School of Management, Marketing, & Employment and a thesis. This thesis must be a piece of original international business research which will be examined by internal and external and external examiners.

MGMT405 Joint Honours in Management 48cp**Annual** Wollongong On Campus**Pre-requisites:** Normally a credit level average of 200 and 300 level subjects.

Subject Description: This subject comprises coursework, and a thesis in management and another cognate discipline (as approved by the Heads of both the academic units involved). The thesis must be a piece of original research which will be examined by internal and external examiners.

MGMT406 Honours Human Resource Management 48cp**Annual** Wollongong On Campus**Pre-requisites:** Normally a credit level average of 200 and 300 level subjects.

Subject Description: This subject comprises coursework, as approved by the Course Coordinator in the School of Management, Marketing & Employment Relations and a thesis. This thesis must be a piece of original human resource management which will be examined by internal and external and external examiners.

MGMT407 Joint Honours in Human Resource Management 6cp**Not on offer in 2004****Pre-requisites:** Normally a credit average of 200 and 300 level subjects**Subject Description:** This subject comprises coursework and a thesis in human resource management and another cognate discipline (as approved by the Course Coordinator of both the academic units/disciplines involved). The thesis must be a piece of original research, which will be examined by internal and external examiners.**MGMT422 Honours Industrial Relations 48cp****Annual/Spring** Wollongong On Campus**Subject Description:** The subject comprises coursework, as prescribed by the Head of the School of Management, Marketing and Employment Relations, and thesis. The thesis must be a piece of original research and is evaluated by internal and external examiners.**MGMT428 Honours Research Project 24cp****Annual** Wollongong On Campus**Pre-requisites:** As for MGMT429**Subject Description:** A research topic agreed with by the Head of the School in any field of management study.**MGMT429 Advanced Topics in Management (Honours) 24cp****Annual/Spring** Wollongong On Campus**Pre-requisites:** Normally a minimum of 50% of 200/300 level subjects in a major, achieved at credit level or higher plus no subject failures**Subject Description:** A course of study prescribed by the Head of School for honours students in one or more of the following areas: Strategy, HRM (including International HRM), Organisation, Enterprise Development, Operations Management and International Business Operations.**MGMT450 Honours Employment Relations 48cp****Annual** Wollongong On Campus**Pre-requisites:** Normally a credit level average of 200- and 300-level subjects**Subject Description:** This subject comprises course work, as approved by the Head of the School and a thesis. The thesis must be a piece of original employment relations research which will be evaluated by internal and external examiners.**MGMT452 Joint Honours in Industrial Relations 24cp****Annual** Wollongong On Campus**Subject Description:** The course work consists of components chosen by the Head of School of Management, Marketing and Employment Relations from those required of students in MGMT422 Industrial Relations. The other 24 credit points in another discipline must be in 400-level subjects approved by the relevant Head of School. The thesis must be a piece of original research and is evaluated by internal and external examiners.

CREATIVE ARTS SUBJECT DESCRIPTIONS

CREA102 Professional Practices 1 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Assessment: Funding/Policy Report (1,000 words) 20%; Journal 1 (1,000 words) 15%; Seminar Presentation Paper (1,000 words) 40%; Journal 2 (1,000 words) 15%; participation 10%

Subject Description: This subject provides an introduction to the Australian arts and cultural environment. Students will investigate a wide variety of issues including: defining the arts; the role and relevance of the arts in contemporary society; the practitioner and the community; the cultural and personal impact of arts practice; ways of being an artist; and employment and career paths in the arts. The subject will offer an overview of arts funding and policy, and examines the role of professional arts organisations. This subject will include a series of guest lectures by practicing artists and representatives of various arts organisations.

CREA202 Professional Practices 2 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Pre-requisites: 36 credit points at 100 level

Assessment: Research Project 60%; Tutorial Presentation and paper 30%; Participation 10%

Subject Description: This subject extends the study begun in CREA102 and pays detailed attention to the Australian arts and cultural environment at the regional and community level. Specific areas of study will include: arts policy and funding; community arts organisations and outcomes; arts education and practice; the role of the artist in sustaining and developing arts practice and innovation; career paths for the artist in education and/or community-based arts practice. This subject will involve a primary research project.

CREA401 Minor Thesis in Creative Arts 24cp

Annual Wollongong On Campus

Pre-requisites: Entry to the Honours year shall be determined by the Dean.

Assessment: Minor thesis of 10,000-15,000 words 80%; Research seminar exercises 20%

Subject Description: The presentation of a minor thesis in the area of a candidate's major study. Candidates shall select an appropriate Creative Arts topic for research, approved by the Dean, and subject to staff availability for supervision and assessment, and the accessibility of relevant literature. Students will attend a seminar series on research methods.

CREA402 Creative Arts Presentation 24cp

Annual Wollongong On Campus

Pre-requisites: Entry to the Honours year shall be determined by the Dean.

Assessment: Submission of a major presentation of creative work 100%.

Subject Description: The presentation of a major exhibition, performance, composition or written folio built on professional competence in the area of a candidate's major study. A proposal outlining the topic, its scope, methods of implementation and presentation shall be submitted for approval by the Dean, and is subject to staff availability for supervision and assessment, and the accessibility of relevant resources.

DESN101 Introduction to Graphic Design 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 3 hrs practical per week

Pre-requisites: Folio/Interview

Co-requisites: VISA121

Exclusions: DESN190

Assessment: Project A 40%; Project B 40%; Case study/Research report 20%

Subject Description: Introduction to graphic design history and the principles and elements of design. Introductory level digital page design, image scanning and image editing for printed media. Emphasis is given to design fundamentals, computer literacy and formal composition.

DESN102 Design for Visual Communications 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 3 hrs practical per week

Pre-requisites: DESN101

Co-requisites: VISA122

Assessment: Project A 40%; Project B 40%; Case study /Research report 20%

Subject Description: This subject examines the design and function of visual identity, logo brands, logotype, information and signage systems and their application to corporate identity and style guides. Emphasis is given to the study of the grammar of graphic design, computer literacy and problem solving.

DESN108 Screen Production A: Documentary 6cp

Summer 2004/05 Wollongong On Campus

MAY NOT BE AVAILABLE IN 2004

Contact Hours: 8 hrs per week or may be offered in a block

Assessment: Camera Exercise 25%; Script Outline 25%; Edited Documentary 50%

Subject Description: This subject aims to familiarise students with the fundamentals of the language of the screen and to examine how these stylistic techniques shape meaning and guide audience expectations and responses. Students will be provided with basic theoretical and practical knowledge of single camera video production. Practical assignments provide experience in the operation of camera and editing equipment and working in a production crew environment. Project focus is on producing a short documentary.

DESN190 Introduction to Digital Imagemaking 6cp

Summer 2004/05 Wollongong On Campus

Contact Hours: 8 hrs per week

Exclusions: Not to count with DESN101

Assessment: Project A 40%; Project B 40%; Case Study 20%

Subject Description: This subject introduces students to visual design fundamentals: composition, colour, line and type and the application of these fundamentals and design techniques in digital imagemaking. Students will use Adobe Photoshop and Adobe Illustrator to create their work.

DESN201 Typography, Type Design and Editorial Illustration 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 3 hrs practical per week

Pre-requisites: DESN102

Co-requisites: VISA221

Assessment: Project A 40%; Project B 40%; Case study 20%

Subject Description: This unit introduces creative typography, type design and editorial illustration, and their function in graphic design. This subject examines the history of typography and illustration and looks at current trends in their application.

DESN202 Publication Design: Image and Text 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 3 hrs practical per week

Pre-requisites: DESN201

Co-requisites: DESN222

Assessment: Project A 30%; Project B.1 30%; Project B.2 20%; Case study and class presentation 20%

Subject Description: This unit examines the use of imagery and type in editorial design for print media. Students will work in a team based on the roles within contemporary design practice and will be encouraged to investigate the design-for-print industry. Class communication this course will be conducted via WebCT.

DESN211 Introduction to Web Design 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 3 hrs practical per week

Pre-requisites: DESN102 or DESN291

Co-requisites: DESN201

Assessment: Design Projects 60%; Process 40%

Subject Description: This unit is an introduction to World Wide Web (WWW) design and production. The focus is on the exploration of innovative design solutions for the WWW and understanding production processes, techniques and technologies. Topics to be covered will include the principle of interface and interactive design, information design, type and colour for the screen, preparing graphics for the internet, and industry practice and practitioners.

DESN212 Advanced Web Design 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 3 hrs practical per week

Pre-requisites: DESN211

Assessment: Design Project 70%; Process 30%

Subject Description: This unit provides students with further critical, conceptual and practical understanding of WWW design principles. Topics to be covered include: interface and interactive design, content management, design conventions and advanced site formatting application.

DESN222 Design Theory 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 1 hr seminar, 1 hr tutorial per week

Pre-requisites: VISA221

Assessment: Tutorial Presentation 20%; Literature Review 30%; Major essay 50%

Subject Description: This subject introduces students to theories and critical writings on design and visual communication. The course covers issues in modernism, critical studies of film and animation, designing audience response, magazine design, fashion, and the formalist and minimalist design theories of late-modernism.

DESN290 Introduction to Graphic Design 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2hr tutorial per week

Pre-requisites: 24 credit points at 100 level

Restrictions: 785, 840, 720, 844, 845, 709

Assessment: Design Projects - 60%; Process 40%

Subject Description: Introduces students to the historical, theoretical and fundamental principles of graphic design. This subject will explore formal composition principals, application of type and image, and approaches to digital layout. Students will be encouraged to explore creative and innovative design solutions to project briefs, and develop fundamental computer literacy.

DESN301 Commercial Graphic Design Practice A 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: DESN202

Co-requisites: DESN321

Assessment: Project A 30%; Project B.1 30%; Project B.2 20%; Report 20%

Subject Description: This unit uses a Design Studio Team model, with students assigned the roles which operate within a design studio. Students are assigned commercial job briefs under the art direction of the lecturer. Clients are selected by the lecturer and students are expected to work within publishing budgets and meet strict production deadlines. Students undertaking this subject will be required to work additional hours outside the subject timetable in order to undertake liaison with clients and coordinate services of commercial printers, pre-press, copywriting and photographic and other production services.

DESN302 Commercial Graphic Design Practice B 6cp**Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture/seminar, 3 hrs practical per week**Pre-requisites:** DESN301**Co-requisites:** DESN322**Assessment:** Major Project OR Role in Graduate Exhibition 50%; Process Document 20%; Industry Research Report 30%**Subject Description:** This unit focuses on building an industry standard portfolio in both print and interactive forms. Alternatively, students may opt to undertake a major role in the Graduate Exhibition. Students will be required to nominate which option they intend to take and to develop the selected option in consultation with their tutor.**DESN311 Interactive Multimedia Design 6cp****Autumn** Wollongong On Campus**Contact Hours:** 1 hr lecture, 3 hrs practical per week**Pre-requisites:** DESN212 or DESN202**Co-requisites:** DESN301 or DESN321**Assessment:** Design Projects 70%; Process 30%**Subject Description:** This unit explores issues surrounding interactive design and project production. This focus is on generating innovative design strategies and solutions within an industry best practice context.**DESN312 Advanced Design Project 6cp****Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture, 3 hrs practical per week**Pre-requisites:** DESN311**Co-requisites:** DESN302 or DESN322**Assessment:** Design Project 60%; Process 40%**Subject Description:** This unit is an advanced level of print and interactive multimedia design and production. The focus is on a self-directed design project that encapsulates the design process and final product development. This unit aims to challenge students to produce a high-level design product that demonstrates the student's abilities in design direction, management and execution.**DESN321 New Media Theory 6cp****Autumn** Wollongong On Campus**Contact Hours:** 2 hrs lecture/seminar, 1 hr tutorial per week**Pre-requisites:** DESN222 or VISA222**Assessment:** Tutorial Presentation 20%; Literature Review 30%; Major essay 50%**Subject Description:** This unit introduces students to critical thinking and research on new media design (web and interactive multimedia). Topics covered include the history of new media theory and digital imaging, popular representations of new media, post-modernism and digital design and sound in digital design. The philosophical influences and analytical methods employed to investigate new media design in cultural context will be studied, as will key digital design movements and critical writings on new media.**DESN322 Advanced Graphic Design Theory 6cp****Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture, 1 hr seminar, 1 hr tutorial per week**Pre-requisites:** DESN321**Assessment:** Tutorial Presentation 20%; Literature Review 30%; Major Essay 50%**Subject Description:** This unit expands on theories of design applicable to the analysis and processes of creative design production. Students are introduced to current critical thinking and research methods. Topics covered include trends in post-modernism, taste clusters in design, fashion theory, subculture theory, globalisation and postcolonial design issues. The philosophical influences and analytical methods employed to investigate design products will be covered, as will social, cultural and political contexts, theorists and critical writings on design and design movements since the late 1950s.**JOUR201 Print Media Reporting 8cp****Autumn** Wollongong On Campus**Contact Hours:** 1 hr lecture, 2 hrs tutorial per week**Pre-requisites:** PHIL106 and either SOC110 or POL121 or any 36 cp WRIT subject (WAM of 75 or above)**Assessment:** In class news writing exercises (6 exercises @ 5% each) 30%. Off-campus news assignments (5 stories @ 10% each) 50%. Final examination (20%).**Subject Description:** The subject focuses on a generic approach to reporting of straight news for the print media. Topics covered are: summary leads; advanced leads; spot news reporting; reporting from news releases; and copy editing. Students submit one story each week on an assigned off-campus topic or based on information sheets handed out during tutorials. Tutorials will focus on news writing and remedial writing exercises, and copy editing. The subject has a final examination to test students' ability to apply basic news writing techniques.**JOUR202 Feature Writing 8cp****Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture and 2 hours tutorial per week**Pre-requisites:** JOUR201**Assessment:** Analysis of investigative stories, case studies (20%). 4 investigative feature writing assignments. Each assignment worth 15% (total 80%).**Subject Description:** This subject focuses on story telling techniques for the print media. Topics covered include: feature story introductions; feature story structures; dialogue and characterisation; scene descriptions; feature length interviews; online and conventional research; developing concepts and marketing of stories. This subject does not have a final examination.

The semester's work comprises submission of 5 features of 800 to 1000 words each on assigned off-campus topics.

JOUR299 Desktop Publishing 8cp**Summer 2004/05** Wollongong On Campus**Contact Hours:** Eight days workshop at five hrs per day**Pre-requisites:** 24 cp subjects at 200 level in Bachelor of Communications and Media Studies degree or 36 cp of any Bachelor of Creative Arts specialisation at 200 level.

Assessment: Case study & design analysis 20%; Copy writing 20%; Publication project 60%

Subject Description: The subject covers the basic copy writing principles and focuses on the application of computer-based design layout and typography to independent publishing of newsletters, publicity brochures and magazine. The teaching software used are PageMaker and Adobe Photoshop. However, this may change with new industry software becoming available.

JOUR301 Investigative Reporting 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs tutorial per week

Pre-requisites: JOUR202

Assessment: Analysis of investigative stories, case studies (20%). 4 investigative feature writing assignments. Each assignment worth 20% (total 80%).

Subject Description: This subject extends students' experience in news and feature writing to critical media investigation of community issues. As research involved in investigative reporting is time consuming, students are required to only submit 4 major investigative features of 1500 words each for the semester. Investigative stories can be submitted as a group project. Lecture topics include: process of news research by conventional and online media; team investigation; investigative and research techniques; story composition; statistical interpretation; and media laws.

JOUR302 Directed Study/Practice 8cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs tutorial per week

Pre-requisites: JOUR301

Assessment: Internship Assessment: Professional evaluation of internship & journal of activities (40%). Stories produced during internship. (30%). Reflective essay of internship (30%). Directed Study Assessment: Mini-thesis (80%). Individual consultation and feedback (20%).

Subject Description: Students will be required to complete a major essay of 8000 words based on a directed program of independent study/readings/research. Area of inquiry will be negotiated with the subject coordinator. Students who have achieved a distinction average in JOUR 201 Print Media Reporting; JOUR 202 Feature Writing; and JOUR 301 Investigative Reporting can choose instead a six-week internship program with a news organisation. Internship performance and outcomes will be evaluated by the news organisation and will cover the student's work output and demonstration of journalistic aptitude as described in the evaluation guidelines. At the end of the internship, students are required to submit the evaluation sheets, a log of weekly activities, and a 2000-word reflective essay of their experience. Staff at the School of Journalism and Creative Writing, and Faculty of Arts will supervise the intern.

PERF102 Studio Practice A 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hrs per week (studio practice)

Pre-requisites: Audition and/or interview

Co-requisites: PERF120 and PERF116

Assessment: Progressive Assessments (2 x 30%) 60%; Proficiency in performance techniques 40%

Subject Description: Studio practice A will introduce students to concepts and processes of stage performance and production using techniques developed by performing arts practitioners. Students will examine the Methodology of the rehearsal process, using genre studied in PERF116 Dramaturgy A as a guide, and will engage in the practice of ensemble performance, improvisation and production skills. The relationship between genre and performance will be explored using techniques developed in PERF120 Performance Skills A. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

PERF103 Studio Practice B 6cp

Spring Wollongong On Campus

Contact Hours: 6 hrs per week (studio practice)

Pre-requisites: PERF102 and PERF116 and PERF120

Co-requisites: PERF117 and PERF121

Assessment: Progressive Assessments (2 x 30%) 60%; Proficiency in performance techniques 40%

Subject Description: In conjunction with work developed in PERF117 Dramaturgy B, PERF102 Studio Practice A and self-initiated projects this subject continues to investigate the process of performance techniques with particular reference to the group as chorus. Students will work in collaborative groups to develop performance material appropriately staged and managed.

PERF116 Dramaturgy A: Text and Performance 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hr lectures, 1 hr tutorial per week

Assessment: Performance analysis/response 30%; Literary analysis tutorial 30%; Essay 40%

Subject Description: Text and Performance: Dramaturgy A introduces the Performance student to the fundamental concepts of text. Particular attention will be paid to editorial theory (authorial intention) as well as the ramifications of contemporary literary theory's adjustment to the way in which we read texts (Post-colonial, Feminist and Queer readings). These issues will be exercised using the genres of Melodrama and Tragedy and to further explore the influence of music on the *mis en scene* and the evolution of Performance Theory.

PERF117 Dramaturgy B: Introduction to Genre and Style 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Pre-requisites: PERF116 or English program equivalent

Assessment: Performance analysis/response 30%; Literary analysis tutorial 30%; Essay 40%

Subject Description: Using a range of texts from the Romantic Movement and the development of the Epic tradition, Dramaturgy A pursues the specifics of generic differentiation. In doing so the parameters of style in performance are examined using both dramatic and musical examples.

PERF120 Performance Skills A 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 x 2 hrs practical**Pre-requisites:** Audition and/or interview**Co-requisites:** PERF102 and PERF116

Assessment: Ongoing class exercises will be assessed satisfactory or unsatisfactory. Practical Assessments - vocal exercises; physical exercises; production techniques. Satisfactory or unsatisfactory.

Subject Description: Together with Studio Practice and Dramaturgy this subject forms part of an essential core in the Performance course with specific reference to vocal, physical and production techniques. Students are required to take a minimum of three (3) performance skill-based study areas offered by the faculty. Specialist performance techniques will be taught in order to access a necessary style in relation to performances or projects developed in Studio Practice. A Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

PERF121 Performance Skills B 6cp**Spring** Wollongong On Campus**Contact Hours:** 3 x 2 hrs practical per week**Pre-requisites:** PERF120 and PERF102 and PERF116**Co-requisites:** PERF103 and PERF117

Assessment: Ongoing class exercises will be assessed satisfactory or unsatisfactory. Practical Assessments - vocal exercises; physical exercises; production techniques. Satisfactory or unsatisfactory.

Subject Description: Students will be expected to build on the techniques and skills developed in PERF120 Performance Skills A. Students are required to take a minimum of three (3) performance skill-based study areas offered by the faculty with specific reference to vocal, physical and production techniques. Together with Studio Practice and Dramaturgy this subject forms part of an essential core in the Performance course. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

PERF202 Studio Practice C 6cp**Autumn** Wollongong On Campus**Contact Hours:** Autumn 8 hrs averaged over session**Pre-requisites:** PERF103 and PERF121 and PERF117

Assessment: Ongoing proficiency by participating in the rehearsal process 60%; Proficiency in performance techniques 40%.

Subject Description: In association with PERF216 Dramaturgy C, & PERF220 Performance Skills C, PERF202 Studio Practice C is an extension of the work covered in PERF103 Studio Practice B. This subject complements other Performance subjects by providing a workshop environment in which the knowledge acquired in Theory and Skills can be put into practice. The subject's fundamental aim is to continue the exploration of recognised rehearsal methodologies and experimental theatre practices, by concentrating on performance interaction in either the interpretation of a set text, or by exploring the principals of devised theatre performance techniques.

PERF203 Studio Practice D 6cp**Spring** Wollongong On Campus**Contact Hours:** 8 hrs averaged over session**Pre-requisites:** PERF202 and PERF220 and PERF216**Co-requisites:** PERF221 and PERF217

Assessment: Ongoing proficiency by participating in the rehearsal process 60%; Proficiency in performance techniques 40%.

Subject Description: In association with PERF217 Dramaturgy D and PERF221 Performance Skills D, continues as an essential component in the performance curriculum. PERF203 Studio Practice D provides a workshop environment in which knowledge acquired in the theory and skills subject s can be put into practice. A continuation of improvisation and acting exercises, rehearsal methodologies and experimental theatre practices will further develop the notion of performance. This subject will develop on-stage interaction with particular reference to naturalism, in the investigation of making meaning, either by the practical interpretation of recognised texts and music scores, or by developing devised performance techniques. Through self-initiated projects, students will be introduced to devised performance, with specific emphasis on the role of ritual in contemporary performance practice.

PERF216 Dramaturgy C: European Modernism and Performance 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hrs lecture, 1 hr tutorial per week**Pre-requisites:** PERF117 or English Program equivalent

Assessment: Performance analysis/response 30%; Literary analysis tutorial 30%; Essay 40%

Subject Description: The responses to modernism, by playwrights, composers and performers working in the highly charged nationalistic circumstances in Europe, are detailed to give students an extensive appreciation of the provocative and evolving performance modes of twentieth century theatre practice: realism, naturalism and verism, expressionism, symbolism and the many subsequent permutations. The incorporation of incidental music into drama and the development of verismo opera, operetta and the musical will be explored while detailing the phenomenon and rise of the director.

PERF217 Dramaturgy D: Australasian Modernism and Performance 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hrs lecture, 1 hr tutorial per week**Pre-requisites:** PERF216 or English Program equivalent

Assessment: Performance analysis/response 30%; Literary analysis tutorial 30%; Essay 40%

Subject Description: The responses to modernism, by playwrights, composers and performers working in Australasia are detailed to give students an extensive appreciation of the provocative and evolving modes of twentieth century theatre and performance practice. In this context, particular attention is given to contemporary trends towards music theatre, physical and non-verbal performance styles as well as an appreciation of the significant European, American, Asian and indigenous Aboriginal influences on the development of Australian dramaturgy and performance.

PERF220 Performance Skills C 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 x 2 hr practical per week**Pre-requisites:** PERF121 and PERF103 and PERF117**Co-requisites:** PERF220 and PERF116**Assessment:** Ongoing class exercises will be assessed satisfactory or unsatisfactory.**Subject Description:** Students will be expected to build on the techniques and skills developed in PERF121 Performance Skills B. Students are required to take a minimum of three (3) performance skill-based study areas offered by the faculty with specific reference to vocal, physical and production techniques. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.**PERF221 Performance Skills D 6cp****Spring** Wollongong On Campus**Contact Hours:** 3 x 2 hr practical**Pre-requisites:** PERF220 and PERF202 and PERF216**Co-requisites:** PERF203 and PERF217**Assessment:** Ongoing class exercises will be assessed satisfactory or unsatisfactory.**Subject Description:** Students will be expected to build on the techniques and skills developed in PERF220 Performance Skills C. Students are required to take a minimum of three (3) performance skill-based study areas offered by the faculty with specific reference to vocal, physical and production techniques. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.**PERF302 Studio Practice E 6cp****Autumn** Wollongong On Campus**Contact Hours:** Autumn 8 hrs averaged over session**Pre-requisites:** PERF203 and PERF221 and PERF217**Co-requisites:** PERF320 and PERF316**Assessment:** Ongoing proficiency by participating in the rehearsal process 60%; Proficiency in performance techniques 40%.**Subject Description:** By a practical exploration of genre studied in PERF316 Dramaturgy E, this subject will develop an individual approach to performance in the further investigation of techniques developed in 200 Level Performance subjects. Through self-initiated projects or through text and music score interpretation, the role of politics in contemporary performance practice will be investigated. PERF302 Studio Practice E, is the practical expression of contemporary performance practice a which compliments other Performance subjects by continuing to develop rehearsal methodologies (expected by industry) and by exploring experimental theatre practices .**PERF303 Studio Practice F 6cp****Spring** Wollongong On Campus**Contact Hours:** Spring 8 hrs averaged over session**Pre-requisites:** PERF302 and PERF320 and PERF316**Co-requisites:** PERF321 and PERF317**Assessment:** Ongoing proficiency by participating in the rehearsal process 60%; Proficiency in performance techniques 40%.**Subject Description:** By a practical exploration of genre studied in PERF317 Dramaturgy F, this subject will explore the

essential elements of characterisation in the investigation of making meaning based on techniques developed at 200 & 300 Level Studio practice. This subjects compliments others in Performance by providing a workshop environment in which knowledge acquired in Theory and Skills can be put into practice. By developing proficiency in character analysis, on-stage performance techniques and in particular, the unification of vocal and physical work as demanded by character, students will further develop their understanding of performance.

PERF316 Dramaturgy E: Comic Traditions and Modes of Performance 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour lecture; 1 hour tutorial per week**Pre-requisites:** PERF217 or English Program equivalent**Assessment:** Ongoing proficiency by participating in the rehearsal process 60%; Proficiency in performance techniques 40%.**Subject Description:** An historic, literary and dramaturgical analysis of the concept and genre of comedy. A survey of the Greek and Roman traditions through the commedia dell arte, to Shakespearean romantic comedy, Restoration comedy, opera buffa and the multifarious twentieth century derivations including the distinctive intentions and qualities of musical comedy - will demonstrate the characteristics, parameters and discipline of the genre.**PERF317 Dramaturgy F: Performance and the Avant-garde 6cp****Spring** Wollongong On Campus**Contact Hours:** 2 hrs lecture, 1 hr tutorial per week**Pre-requisites:** PERF316 or English Program equivalent**Assessment:** Ongoing proficiency by participating in the rehearsal process 60%; Proficiency in performance techniques 40%.**Subject Description:** The fundamentals of dramaturgical analysis and performance theory will be applied to contemporary performance and theatrical practice (including physical theatre; multimedia, film and television; performance art; music-theatre) to facilitate an appreciation of expansive and diverse post-modernist performance trends. The subject will highlight the relationship between the function of text ; the multi-skilling and multidisciplinary associated with contemporary performance and the strategies associated with manipulation of audience . The position and function of performance journalism, commentary and criticism will also be examined.**PERF320 Performance Skills E 6cp****Autumn** Wollongong On Campus**Contact Hours:** 3 x 2 hrs per week**Pre-requisites:** THEA203 and PERF217**Assessment:** Ongoing class exercises Practical assessments: Physical etudes 40%; Vocal etudes; Production techniques in relation to text 30%**Subject Description:** This subject continues to form an essential core area of study, developing from 100 and 200 Level subjects in the Performance curriculum. An accomplishment of the techniques in performance skills by students (vocal, physical and production) will underpin the fundamental nature of the subject to the performance practitioner. Students are required to take three (3) performance

skills based study areas which will further their understanding and appreciation of these core elements.

PERF321 Performance Skills F 6cp

Spring Wollongong On Campus

Contact Hours: 3 x 2 hrs per week

Pre-requisites: PERF320 and PERF304 OR PERF306 and PERF316

Co-requisites: PERF305 or PERF307 and PERF317

Assessment: Ongoing class exercises Practical assessments: Text based exercises, physical exercises, production techniques. All assessed satisfactory or unsatisfactory.

Subject Description: This subject continues to form an essential core area of study, developing from 100 and 200 Level subjects in the Performance curriculum. An accomplishment of the techniques in performance skills by students (vocal, physical and production) will underpin the fundamental nature of the subject to the performance practitioner. Students are required to take three (3) performance skills based study areas which will further their understanding and appreciation of these core elements.

SCMP101 Investigations in Sound 1 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hr lecture, 1 hr seminar per week

Pre-requisites: Interview/Audition

Co-requisites: SCMP111

Assessment: Folio of projects (4x15%) 60%; Process Journal 30%; Oral Presentation 10%

Subject Description: This subject allows students to create several small-scale projects in both instrumental and digital genres, and to explore techniques for the development and manipulation of materials in a sound environment.

SCMP102 Investigations in Sound 2 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SCMP101

Co-requisites: SCMP112

Assessment: Creative Folio (3x20%) 60%; Process report 20%; Performance review 20%

Subject Description: This subject builds on a study of techniques of musical composition begun in SCMP 101, and will develop scores in both live performance and pre-recorded genres. Students will work individually and in collaboration with their peers and with students from other disciplines to create a variety of compositional projects including multi-disciplinary works. The subject will develop fluency in the language of critical evaluation in the performance of contemporary music.

SCMP111 Issues in Sound 1 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Assessment: Class Presentation 10%; Essay (2,000 words) 40%; Exam 50%

Subject Description: This subject begins the study of basic acoustics and the properties of sound, from both an historical and contemporary viewpoint.

SCMP112 Issues in Sound 2 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SMP111

Assessment: In-class assignments (5 x 10%) 50%; Essay (2,000 words) 25%; Notation Project 25%

Subject Description: This subject further explores contemporary issues in sound, continues the development of analytical listening skills and introduces students to different styles of musical notation.

SCMP121 Sound Studies 1 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: Interview/Audition

Co-requisites: SCMP101

Assessment: Improvisations (2 x 15% and 2 x 10%) 50%; Essay (1,000 words) 10%; Process Journal 20%; Listening Tests (2 x 10%) 20%

Subject Description: This subject allows students to study methodologies of improvisation and listening skills.

SCMP122 Sound Studies 2 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SCMP121

Co-requisites: SCMP102

Assessment: Improvisation Test 30%; Essay (2,500 words) 40%; Final Exam (Aural) 30%

Subject Description: This subject allows students to further their studies in the methodologies of improvisation and listening skills. The two hours of lecture in the class will be given to the study of improvisation and the one hour of tutorial will explore aural skills and the development of critical, active listening skills.

SCMP201 Investigations in Sound 3 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SCMP102

Co-requisites: SCMP221

Assessment: Oral Presentations 10%; Folio (3 x 20%) 60%; Process Journal 30%

Subject Description: This subject encourages intra and inter-disciplinary collaboration within the performance and digital genres to create new works. These works will be of a larger scale than those created in the first year of the course.

SCMP202 Investigations in Sound 4 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SCMP201

Co-requisites: SCMP222

Assessment: Folios (2 x 30%) 60%; Concert Review 20%; Process Report 20%

Subject Description: This subject will focus on large sound/music projects. Possibilities will include composing music/sound for video, advanced Pro Tools projects, recording and CD mastering projects and the creation of large ensemble

acoustic works. In addition, a performance event will occur to enable those students who wish to perform live (either individually or collectively) to do so. Projects will be both individual and collaborative.

SCMP211 Issues in Sound 3 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SCMP112

Assessment: Draft Essay 10%; Final Essay 45%; Listening Exam 25%; Tutorial Presentations (2 x 10%) 20%

Subject Description: This subject will explore the history of Australian music. It examines the contextualisation of Australian music in relation to indigenous, national and international perspectives.

SCMP212 Issues in Sound 4 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SCMP211

Assessment: Large Scale Investigation project 50%; Essay (3,000 words) 50%

Subject Description: This subject provides the opportunity for students to further explore theoretical and practical issues in relation to the creation of music and soundscapes. Such issues will include new software, new performance technologies and compositional approaches. The course will also provide a historical and cultural context for many new directions in contemporary music.

SCMP221 Sound Studies 3 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Pre-requisites: SCMP122

Co-requisites: SCMP201

Assessment: Class Presentations 30%; Essay (2,000 words) 40%; Exam 30%.

Subject Description: This subject examines the creative deployment of acoustical theory and music technology in the work of a wide range of contemporary and twentieth century composers.

SCMP222 Sound Studies 4 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Pre-requisites: SCMP221

Co-requisites: SCMP202

Assessment: Folio of projects 50%; Assignments 50%.

Subject Description: This subject will examine the history and influence of the recording industry and develop student's discography skills.

SCMP301 Investigations in Sound 6 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture; 1 hr seminar per week

Pre-requisites: SCMP202

Co-requisites: SCMP321

Assessment: Folio of projects 70%; Assignments 30%.

Subject Description: In this subject students will compose music for large scale forces. Opportunities will exist for students to manage aspects of performance and/or the web publishing of music sites and to develop work experience connections. Collaborative and individual projects will be pursued and the subject will be collaboratively taught and assessed. Students' specialisations will be further encouraged and developed.

SCMP302 Investigations in Sound 6 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SCMP301

Co-requisites: SCMP322

Assessment: Folio of projects 70%; Assignments 30%

Subject Description: Investigations in Sound 6: This project - centred subject will concentrate on the creation of solo and collaborative creative works. Students will have the opportunity to create works in instrumental, vocal, theatrical or digital genres, or any combination thereof.

SCMP311 Issues in Sound 5 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr seminar per week

Pre-requisites: SCMP212

Assessment: Project Folios 50%; Major Creative Work 25%; Documentation 25%

Subject Description: This subject introduces the basics of computer music synthesis through a language known as Csound. The student will learn how to edit, convert and play a Csound score and orchestra file. The student prepares for a major creative project by undertaking a folio of three assignments. The first assignment introduces the Csound score; the second introduces the Csound orchestra - a collection of instruments that is freely available as public domain software on a variety of personal computer platforms; the third shows how to work more easily with Csound using other musical applications. The major creative project will be a composition that takes advantage of some feature of the vast musical resources available within the world of Csound.

SCMP312 Issues in Sound 6 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Pre-requisites: SCMP311

Assessment: Project Folios 50%; Major Creative Work 25%; Documentation 25%

Subject Description: This subject explores a form of composition known as sound installation where the role of the composer is extended to include design and implementation of purpose-built electronic hardware. Students will learn the basics of electronic hardware by building a simple electronic kit. This will then be used as part of their major creative project, a sound installation that deploys one or more kits in creative applications devised by the student. The term sound installation may include performance using a kit in conjunction with an existing instrument, performance using multiple kits, or sound sculpture that requires spectator intervention, to name but three examples. The student may work individually or with a team of collaborators. This study will take place against the backdrop of a broad spectrum of electronic music composers.

SCMP321 Sound Studies 5 6cp
Autumn Wollongong On Campus
Contact Hours: 2 hrs lecture, 1 hr tutorial per week
Pre-requisites: SCMP222
Co-requisites: SCMP301
Assessment: Folio of projects 70%; Assignments 30%
Subject Description: This subject focuses on professional practices for sound artists including grant-writing, networking and project management skills.

SCMP322 Sound Studies 6 6cp
Spring Wollongong On Campus
Contact Hours: 2 hrs lecture, 1 hr tutorial per week
Pre-requisites: SCMP321
Co-requisites: SCMP302
Assessment: Assignments - (4 x 25%) 100%
Subject Description: This subject continues and develops the professional skills of project management and grant writing begun in SCMP321, with an additional emphasis on the use of electronic and digital propagation methods.

VISA101 Visual Investigations A 6cp
Autumn Wollongong On Campus
Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week
Pre-requisites: Folio of Work/Interview
Co-requisites: VISA103 or DESN101
Assessment: Journal and Process Work 30%; Written Research (1,000 words) 10%; Journal and Process (completed) 25%; Self Initiated Project 35%
Subject Description: An introduction to the language of visual art and design through workshops, practical exercises and concept-based projects in which students will explore a range of graphic and visual art media. Field trips to relevant exhibitions and exposure to art and design history and theory will contextualise these studies. Emphasis will be placed on developing observational drawing skills.

VISA102 Visual Investigations B 6cp
Spring Wollongong On Campus
Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week
Pre-requisites: VISA101
Co-requisites: VISA122
Assessment: Journal/Process work 30%; Written Research (1,000 words) 10%; Journal/Process work (completed) 25%; Self Initiated Project 35%
Subject Description: Further studies in the language of visual art and design through workshops, practical exercises and concept-based projects in which students will explore a range of graphic and visual art media. Field trips, exhibition visits and exposure to art and design history and theory will contextualise these studies. Emphasis will be placed on developing observational drawing skills.

VISA103 Introduction to Visual Arts Studio A 6cp
Autumn Wollongong On Campus
Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week
Pre-requisites: Folio of Work/Interview
Co-requisites: VISA121
Assessment: Journal and Process Work 30%; Written Research (1,000 words) 10%; Journal and Process (completed) 25%; Self Initiated Project 35%
Subject Description: An introduction to concepts, processes and media within the areas of painting, printmaking, textiles and sculpture. The subject will include studio theory, introduction to the use of appropriate media and equipment, set class exercises, self-initiated projects and gallery visits. Practical work will be assessed on effort, imagination, experimentation and demonstrated skills.

VISA104 Introduction to Visual Arts Studio B 6cp
Spring Wollongong On Campus
Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week
Pre-requisites: VISA103
Co-requisites: VISA122
Assessment: Journal and Process Work 30%; Written Research (1,000 words) 10%; Journal and Process (completed) 25%; Self Initiated Project 35%
Subject Description: An extension of work covered in VISA103 Visual Arts Studio A in concepts and media drawing from the basic areas of painting, printmaking, photography, sculpture and textiles. The subject will include studio theory, and appropriate use of media and equipment, class exercises, self-initiated exercises and gallery visits. Practical work will be assessed on effort, imagination and experimentation in the work practice.

VISA121 Introduction to Theories of Visual Culture 6cp
Autumn Wollongong On Campus
Contact Hours: 2 hrs lecture/seminar, 1 hr tutorial per week
Assessment: Case Study 40%; Major Essay (2,500 words) 50%; Tutorial Paper/Presentation 10%
Subject Description: Objects and images, whether originating in the fields of art, craft or design, whether unique or mass-produced, for private or public consumption, will encode the values, tastes and ideologies of their culture. Within three broad themes, we look at our visual culture of objects and images, their production, their social and aesthetic frameworks, their shared symbolic languages and the theories that attempt to elucidate them. Examples from design, architecture, art, craft and the broader field of public art and design will be presented for further research and analysis.

VISA122 Perspectives on Modernism 6cp
Spring Wollongong On Campus
Contact Hours: 2 hrs lecture/seminar, 1 hr tutorial per week
Pre-requisites: VISA121
Assessment: Case Study (1,500 words) 40%; Major Essay (2,500 words) 50%; Tutorial Paper/Presentation 10%
Subject Description: This subject brings a contemporary perspective to some of the key innovations, ideas and values of C19th and C20th modernism. With recent post-modern critiques

distancing us from the heroic narratives of earlier art history writing, we try to identify the meanings and continuing value of modern art and design for our contemporary practice. The assessment tasks are designed to develop your skills in looking, analysing and thinking through writing and, to this end, you will be asked to research topics and make connections from a wide range of sources.

VISA124 Introduction to Photography 6cp

Summer 2004/05 Wollongong On Campus

Assessment: Journal/Process Work 30%; Written Research (1,000 words) 10%; Journal/Process Work (completed) 25%; Self Initiated Project 35%

Subject Description: This subject is an overview of the camera in the area of analogue technology. It includes the use of 35mm and/or pinhole cameras. Lectures, excursions, demonstrations and workshops are organised that lead to self-initiated projects. Students are expected to maintain a visual diary of their art processes.

VISA190 Visual Arts Workshop A 6cp

Summer 2004/05 Wollongong On Campus

MAY NOT BE AVAILABLE IN 2004

Pre-requisites: (Folio of Work) or (VISA103) or (VISA104)

Assessment: Journal/Process work 30%; Written Research (1,000 words) 10%; Journal/Process work (completed) 25%; Self Initiated Project 35%

Subject Description: Intensive workshops in the visual arts will be offered by professional artists and craftspeople. The workshops offered will depend on the tutors' expertise and availability, but will aim to develop the technical skills and creative potential of each student.

VISA201 Visual Investigations C 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: VISA102

Co-requisites: VISA203

Assessment: Journal/Process work 30%; Written Research (1,000 words) 10%; Journal/Process work (completed) 25%; Self Initiated Project 35%

Subject Description: This subject further develops students' technical, visual and conceptual skills in graphic and drawing media. Classwork will be thematic with reference to contemporary issues, ideas and art practice. Emphasis will be placed on the development of independent ideas and visual language in each student. Students will elect from one of the following workshops (as available) - drawing, printmaking, photography. Classes will be supported by regular lectures, seminars, reviews and fieldwork.

VISA202 Visual Investigations D 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: VISA201

Co-requisites: VISA222 and VISA204

Assessment: Journal/Process work 30%; Written Research (1,000 words) 10%; Journal/Process work (completed) 25%; Self Initiated Project 35%

Subject Description: This subject further develops students' technical, visual and conceptual skills in graphic drawing and photographic media. Classwork will be thematic with reference to contemporary issues, ideas and art practice. Emphasis will be placed on the development of independent ideas and visual language. Students will elect from one of the following workshops (as available) - drawing, printmaking, photography. Classes will be supported by regular lectures, seminars, reviews and fieldwork.

VISA203 Visual Arts Studio C 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: VISA103 and VISA104

Co-requisites: VISA221

Assessment: Journal and Process Work 30%; Written Research (1,000 words) 10%; Journal and Process Work (completed) 25%; Self Initiated Project 35%

Subject Description: Students will be expected to build on the concepts, techniques and skills acquired in 100 level studies. Students will have the opportunity to choose studio areas from painting, printmaking, textiles (surface design or constructed) and sculpture, developing their practice through set exercises, gallery visits and self-initiated work.

VISA204 Visual Arts Studio D 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: VISA203

Co-requisites: VISA222

Assessment: Journal/Process work 30%; Written Research (1,000 words) 10%; Journal/Process work (completed) 25%; Self Initiated Project 35%

Subject Description: Students will be encouraged to develop further understanding of studio practice and contemporary practice through set exercises, gallery visits and self-initiated work. Students will have the opportunity to choose studio areas from painting, printmaking, sculpture or textiles (constructed or surface design).

VISA221 Early Visual Arts and Design in Australia 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture/seminar, 1 hr tutorial per week

Pre-requisites: VISA122

Restrictions: Available BCA Majors only.

Assessment: Research Project (1500 words) 30%; Tutorial Presentation 20%; Major Essay (2,500 words) 50%

Subject Description: This subject surveys art and design movements in Australia since European settlement. These histories are discussed with reference to individual artists and the social and cultural contexts of exploration and colonialism. Students are introduced to key concepts underpinning early modernism in visual art and design.

VISA222 The Artist in Contemporary Culture 6cp

Autumn/Spring Wollongong On Campus

Contact Hours: 2 hrs lecture/seminar, 1 hr tutorial per week

Pre-requisites: VISA221

Assessment: Research paper (1,500 words) 30%; Tutorial Presentation 20%; Major Essay (2,500 words) 50%

Subject Description: This subject examines the role of the artist in relation to contemporary cultures, in Australia and other countries. The subject emphasises the relationship of current theoretical issues to practice, exhibition and installation in the visual arts and crafts. Students will research an area of arts practice or an artist which relates to their major study, both through textual and visual research.

VISA301 Visual Investigations E 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: VISA202

Co-requisites: VISA303 and VISA321

Assessment: Journal/Process work 30%; Written Research (1,000 words) 10%; Journal/Process work (completed) 25%; Self Initiated Project 35%

Subject Description: In a range of visual media (manual, digital and photographic) and formats (including performance and installation) students will investigate areas of visual communication in ways that complement or diversify the concerns of their major studio practice. Individual project proposals will be agreed to in consultation with the appropriate lecturer.

VISA302 Visual Investigations F 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: VISA301

Co-requisites: VISA304 and VISA322

Assessment: Journal/Process work 30%; Written Research (1,000 words) 10%; Journal/Process work (completed) 25%; Self Initiated Project 35%

Subject Description: In a range of visual media (manual, digital and photographic) and formats (including performance and installation) students are able to investigate areas of visual communication in ways that complement or diversify the concerns of their major studio practice. Individual project proposals will be agreed to in consultation with the appropriate lecturer.

VISA303 Advanced Visual Arts Studio E 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: VISA204

Co-requisites: VISA321

Assessment: Case Study (1,500 words) 40%; Major Essay (2,500 words) 50%; Participation 10%

Subject Description: Students may choose to specialise or combine visual arts media. Interdisciplinary work will be encouraged. A self-initiated major project will be developed in consultation with the lecturer and appropriate research undertaken. Students will document their work processes and research, present their work for review on a regular basis and take active part in class reviews, seminars and excursions. Emphasis will be placed on individual development, self-management and awareness of contemporary visual arts issues.

VISA304 Advanced Visual Arts Studio F 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture/seminar, 3 hrs practical per week

Pre-requisites: VISA303

Co-requisites: VISA302 and VISA322

Assessment: Journal/Process work 30%; Written Research (1,000 words) 10%; Journal/Process work (completed) 25%; Self Initiated Project 35%

Subject Description: Students may choose to specialise or combine visual arts media. Interdisciplinary work will be encouraged. A self-initiated major project will be developed in consultation with the lecturer and appropriate research undertaken. Students will document their work processes and research, present their work for review on a regular basis and take active part in class reviews, seminars and excursions. Emphasis will be placed on individual development, self-management and awareness of contemporary visual arts issues.

VISA321 Introduction to Indigenous Art and Visual Culture 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture/seminar, 1 hr tutorial per week

Pre-requisites: VISA222

Assessment: Research Proposal 20%; Tutorial Paper 40%; Major Essay 40%

Subject Description: This subject surveys the concept of visual culture as a way of understanding contemporary art, with a particular focus on indigenous arts in Australia. The importance of underlying traditions is investigated in both Aboriginal and non-Aboriginal arts, through a study of funerary art and public memorial. Both textual and visual research strategies are emphasised in presentation and writing.

VISA322 Representation and Space in Post Colonial World 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture/seminar, 1 hr tutorial per week

Pre-requisites: VISA321

Assessment: 1 research proposal (600 words) 20%; 1 seminar presentation and tutorial paper of 2,000 words 40%; 1 major essay of 3,000 words 40%

Subject Description: This subject surveys contemporary arts practices, with a focus on Australian arts. There is an emphasis on reviewing current exhibitions and the use of theoretical perspectives and critical practices appropriate to recent art debates, exhibitions and studio practices.

VISA341 Bookworks 6cp

Summer 2004/05 Wollongong On Campus

MAY NOT BE AVAILABLE IN 2004

Pre-requisites: VISA241

Assessment: Journal/Process Work 30%; Written Research (1,000 words) 10%; Journal/Process Work (completed) 25%; Self Initiated Project 35%

Subject Description: This subject continues the process begun in VISA241 and allows students to engage with the process of building books around ideas or text. More complicated book forms will be examined and the use of alternative materials encouraged. Presentation of the work will

be an important part of the final assessment. Visiting artists will be involved in the program and visits will be made to museum collections and exhibitions related to the book form.

VISA350**Introduction to Curatorial Practices** **6cp**

Autumn/Spring Wollongong On Campus

Contact Hours: 3 hrs seminars per week

Pre-requisites: Interview

Co-requisites: (VISA321) or (VISA322) OR (DESN321) or (DESN322)

Assessment: Case Study 30%; Professional Practice Report 40%; Curatorial Report 30%

Subject Description: This subject will give students expertise in all aspects of exhibition curation and gallery administration, including preparation of a catalogue essay, a press-release, a complete list of works and a photographic documentation of the works on completion. Each student will be given principal responsibility for one Long Gallery exhibition.

VISA390 Visual Arts Workshop C **6cp**

Summer 2004/05 Wollongong On Campus

MAY NOT BE AVAILABLE IN 2004

Pre-requisites: (Folio of Work) or (VISA203) or (VISA204)

Assessment: Journal/Process Work 30%; Written Research (1,000 words) 10%; Journal/Process Work (completed) 25%; Self Initiated Project 35%

Subject Description: VISA390 VISUAL ARTS WORKSHOP C. Intensive workshops in the visual arts will be offered by professional artists and craftspeople. The workshops offered will depend on the tutors' expertise and availability, but will aim to develop the technical skills and creative potential of each student.

WRIT101 Introduction to Creative Writing **6cp**

Autumn/ Wollongong On Campus

Summer 2004/05

Contact Hours: 1 hr lecture, 2 hrs seminar per week

Exclusions: WRIT111

Assessment: Portfolios 90%; participation 10%

Subject Description: This subject provides an introduction to the creative writing process for students without a strong background in writing. Students will explore topics such as: finding ideas for writing; language and the writer; the drafting process; the workshop process; editing and marketing. Major forms of contemporary writing are explored, including prose fiction, poetry, scriptwriting.

WRIT111 Writing Overview **6cp**

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week

Pre-requisites: Folio of work, interview

Co-requisites: WRIT119

Restrictions: Only available to BCA Writing majors

Exclusions: WRIT101

Assessment: Folio 1: 40%; Folio 2: 50%; Participation 10%

Subject Description: This subject provides an introduction to the creative writing process. Topics include: exploring sources of ideas for writers; language and the writer; the drafting process; the workshop process; editing and marketing. The major forms of contemporary writing are explored, including prose fiction, poetry and scriptwriting.

WRIT119 Writing Theory: Classicism to Romanticism **6cp**

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Pre-requisites: Folio of work and interview

Co-requisites: WRIT111

Restrictions: Only available to BCA Writing majors

Assessment: Essay 50%; Assignments 40%; Participation 10%

Subject Description: This subject examines the tradition of writing theory and its applicability to contemporary writing practice. The subject concentrates on a number of key texts in poetics from Classicism to Romanticism and examines various works (in poetry, prose and drama) which may be seen to exemplify, modify, or challenge these poetics. Students are required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.

WRIT121 Writing For Stage and Screen **6cp**

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week

Pre-requisites: WRIT111

Co-requisites: WRIT129. Co-requisite waived for BA students specialising in Communication and Cultural Studies who have completed WRIT101

Assessment: Draft script 30%; final script 40%; workshop presentation 20%; participation 10%

Subject Description: This subject examines the creative use of language in performance, with particular reference to film, television and stage. Through lectures, script workshoping, class discussion and student papers the basic principles of writing for performance are studied and applied. By the end of this subject students will be ready to undertake further specialised studies in writing for stage or screen.

WRIT122 Writing Prose Fiction 100 **6cp**

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week

Pre-requisites: WRIT111

Co-requisites: WRIT129

Assessment: Folios 60%; Exercises 30%; Participation 10%

Subject Description: This subject provides an introduction to the writing of prose fiction concentrating on short fiction texts. This subject will consider the options available to an author in the areas of voice and tense and examine various strategies which may be employed in the uses of description, character and dialogue in both realist and non-realist modes. Attention will be paid to conventional and alternative structures. An intensive workshoping of participants' work will operate throughout the subject.

WRIT123 Poetry 100: Introduction to Writing Poetry 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week**Pre-requisites:** WRIT111**Co-requisites:** WRIT129**Assessment:** Portfolio 1 – 30%; Portfolio 2 – 50%; Anthology 10%; Participation 10%**Subject Description:** This subject introduces the writing of poetry, exploring those features that make poetry distinctive from other forms of writing. Emphasis will be on both the student's own writing and the work of a wide range of poets, mainly though not exclusively modern.**WRIT129 Theory for Practising Writers: Realism to Modernism 6cp**

Spring Wollongong On Campus

Contact Hours: 2 hrs lectures, 1 hr tutorial per week**Pre-requisites:** WRIT119**Co-requisites:** 6 credit points of any WRIT subject**Assessment:** Essays 50%; Assignments 40%; Participation 10%**Subject Description:** This subject examines the tradition of writing theory and its applicability to contemporary writing practice. The subject concentrates on a number of key texts in poetics from the Modernist period and examines various works (in poetry, prose and drama) which may be seen to exemplify, modify or challenge these poetics. Students will be required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.**WRIT210 Writing for the Internet 6cp**

Autumn/Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week**Pre-requisites:** WRIT 111**Co-requisites:** WRIT229**Assessment:** Non collaborative project 30%; Collaborative project 30%; Exercises 40%**Subject Description:** A subject in writing for the internet, focussing primarily on the use of language but also exploring how graphic input and hypertext design can relate to overall site design. Students will research internet writing strategies and methodologies in theory and practice, applying their findings in a review of existing web sites, and will develop a web page using their own creative writing.**WRIT211 Writing/Performing 6cp**

Autumn Wollongong On Campus

Contact Hours: 3 hrs seminar per week**Pre-requisites:** 30 cp of WRIT subjects or 36cp of PERF at 100 level**Assessment:** Performance 40%; seminar 30%; draft performance 20%; participation 10%**Subject Description:** This subject is for students who want to write and perform their own text. It examines the nature of the 'bodyword'; and how to write and stage it. Monologue and performance poetry are the main forms explored.**WRIT212 Writing Prose Fiction 200 6cp**

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week**Pre-requisites:** WRIT122**Co-requisites:** WRIT219**Assessment:** Portfolio (2) 60%; exercises on prose techniques 30%; participation 10%**Subject Description:** This subject examines development of prose fiction writing in both short and extended forms. An examination of writing strategies in a range of modes, from realism to metafiction and various de-metaphorising texts. An intensive workshopping of participants' work will operate throughout the subject.**WRIT213 Poetry 200: Poetic Forms 6cp**

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week**Pre-requisites:** WRIT123**Co-requisites:** WRIT229**Assessment:** Portfolio 1 – 30%; Portfolio 2 – 50%; annotated anthology 10%; participation 10%**Subject Description:** This subject centres on a wide variety of verse forms (with accompanying metres, word games and devices) both in the student's own work and through looking at poems in English from the 16th Century to the present day. Each class will centre on examples from the above ranging from the most traditional to the most avant-garde. All class members are expected to attempt a variety of these verse forms.**WRIT214 Writing For Theatre 200 6cp**

Autumn/Summer Wollongong On Campus

2004/05**Contact Hours:** Autumn 3 hrs per week; Summer 6 hrs per week**Pre-requisites:** WRIT121**Co-requisites:** WRIT219**Assessment:** Script (draft) 30%; script (final) 40%; presentations 20%; participation 10%**Subject Description:** Students undertake an investigation of the techniques and theory of writing for the stage and for performance. Linear and non-linear traditions, characterisation, dialogue, and a variety of structures including climactic, episodic, situational, vertical and reflexive are examined. Students complete a script and undertake theoretical studies relevant to practice. Students are encouraged to master, but also challenge, conventions, and to explore collective modes of writing.**WRIT215 Writing For Film and Television 200 6cp**

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs tutorial per week**Pre-requisites:** WRIT121**Co-requisites:** WRIT219**Assessment:** Stories for Features 10%; Concept and first draft 40%; 2nd draft and development notes 40%; Participation 10%**Subject Description:** This subject prepares students to write scripts at professional standard for the screen. Lectures, workshopping, tutorial papers and guided discussion develop students' knowledge, skill and theory in such areas as structure,

characterisation, dialogue, adaptation, genre, and visualisation. Students will write a script for the screen and will be introduced to alternative dramatic structures for screen writing, as well as learning how to write critically about screenwriting.

WRIT216 Editing Practice for Creative Writers 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week

Pre-requisites: 30 cp of WRIT subjects at 100 level

Co-requisites: WRIT229

Assessment: Interview 30%; Editing of 'Zine' 30%; Editing Exercises 30%; Participation 10%

Subject Description: The subject examines many types of editing: self-editing, journal editing and book editing from the perspective of both the editor and the writer-being-edited. This will include all aspects of the editing process from the simple necessities of house style, style manuals and editorial symbols, through putting together an issue of a magazine, to editorial policy, book structure and consistency.

WRIT219 Writing Theory: Modernism 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Pre-requisites: WRIT129

Co-requisites: Any WRIT subject

Assessment: Essays 50%; Assignments 40%; participation 10%

Subject Description: This subject examines the tradition of writing theory and its applicability to contemporary writing practice. The subject concentrates on a number of key texts in poetics from the Modernist period and examines various works (in poetry, prose and drama) which may be seen to exemplify, modify or challenge these poetics. Students are required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.

WRIT222 Writing Extended Prose Fiction 6cp

Spring Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week

Pre-requisites: WRIT 212

Co-requisites: WRIT229

Assessment: Extract from extended prose text (2 x 30%) 60%; seminar presentation 30%; participation 10%

Subject Description: This unit seeks to identify a range of structural variants in extended prose works - specifically that of the novella - and to articulate appropriate writing strategies in a spectrum of modes. The first part of the unit will analyse a number of exemplary texts in order to provide a variety of possible models and instruction will be given in specific techniques for originating and developing material appropriate to the novella form. The latter part of the unit will be spent in intensive workshoping of participants' original work. Upon entry to the unit, participants will be required to submit a plan for an extended prose work. Programs of development will be set in place to meet the particular needs of each project.

WRIT228 Writing For Sound 200 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week

Pre-requisites: WRIT121

Co-requisites: WRIT 219

Assessment: Sound Exercise 5%; Treatment 25%; Script 60%; participation 10%

Subject Description: This subject examines the fundamentals of scriptwriting or scoring for sound in both conventional and experimental modes. The subject will examine the creative use of the sound medium in radio drama, documentary and other audio art texts. An intensive workshoping of participants' work will operate in the second part of the subject.

WRIT229 Writing Theory: Modernist Avant Gardes 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week

Pre-requisites: WRIT219

Co-requisites: Any WRIT subject

Assessment: Essays 50%; Assignments 40%; particip. 10%

Subject Description: This subject examines the tradition of writing theory and its applicability to contemporary writing practice. The unit concentrates on a number of key texts in poetics from the Modernist period, and examines various works (in poetry, prose, drama and film) which may be seen to exemplify, modify or challenge these poetics. Students will be required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.

WRIT312 Advanced Prose Fiction A 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar per week

Pre-requisites: WRIT212 or WRIT222

Co-requisites: WRIT319

Assessment: Portfolios (2) 90%; participation 10%

Subject Description: This subject will concentrate on some of the alternative structures and approaches available to contemporary writers such as magic realism, documentary and biographical fiction, ficto-criticism, the poetic novel. The subject will examine the work of a range of contemporary writers working in a variety of styles and modes. There will be extensive workshoping of students' work. Students may engage in longer fictional forms (novella, novel) developing their work over this subject and WRIT322.

WRIT313 Advanced Poetry A 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hr lecture, 2 hrs seminar/workshop per week

Pre-requisites: WRIT213

Co-requisites: WRIT319

Assessment: Seminar paper 30%; Portfolios (2 x 25%) 50%; Journal 10%; Participation 10%

Subject Description: This subject explores the application of myth in poetry writing. Students experiment with various themes, poetic forms and techniques, while examining their personal poetics in relation to those of established poets and the poetic tradition. Writing on and with myths, re-inventing/contemporising traditional mythologies and personal mythmaking will be given special attention.

WRIT314 Writing For Theatre 300 6cp**Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture, 2 hrs seminar per week**Pre-requisites:** WRIT214**Co-requisites:** WRIT329**Assessment:** Script (draft) 30%; Script (final) 40%; presentation 20%; participation 10%**Subject Description:** This subject is conducted primarily through the development of a full-length script for the stage. Students will also study the practical application of dramatic theory. Workshoping, lectures, tutorial papers and guided discussion will develop skills in conjunction with practical theory, so that students may achieve professional standards. Links with the theatre industry will be encouraged.**WRIT315 Writing For Film and Television 300 6cp****Autumn** Wollongong On Campus**Contact Hours:** 1 hr lecture, 2 hrs tutorial per week**Pre-requisites:** WRIT215**Assessment:** Adaptation concept 20%; First Draft 30%; Second draft and notes 50%**Subject Description:** The subject prepares students to write at a professional level. Through an exploration of the traditional of the classical and the modern scenario, students are exposed to the concepts that inform storytelling for the screen, both invisible and experimental. Students reflect on scriptwriting as an adaptation process while developing a full length script for the screen.**WRIT317 The Writer and the Media 6cp****Autumn** Wollongong On Campus**Contact Hours:** 1 hr lecture, 2 hrs tutorial per week**Pre-requisites:** 66 cp of WRIT subjects**Co-requisites:** WRIT319**Assessment:** Contribution to Panel 30%; Seminar Paper 20%; Research Project 40%; Participation 10%**Subject Description:** This subject aims to develop a range of skills necessary for developing writing at a professional level. Issues to be covered include: writing for the media, dealing with agents and publishing houses, grant applications, participation in writing festivals (as panelist, as featured writer, as reader) the role of writers' centers and professional organisations.**WRIT319 Writing Theory: Structuralism to the Postmodern 6cp****Autumn** Wollongong On Campus**Contact Hours:** 2 hrs lecture, 1 hr tutorial per week**Pre-requisites:** WRIT229**Co-requisites:** Any WRIT subject**Assessment:** Essays 50%; Assignment 40%; Participation 10%**Subject Description:** This subject examines the tradition of writing theory and its applicability to contemporary writing practice. The unit concentrates on a number of key texts in poetics from Structuralism to the Postmodern and examines various works (in poetry, prose and drama) which may be seen to exemplify, modify or challenge these poetics. Students are required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts.**WRIT322 Advanced Prose Fiction B 6cp****Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture, 2 hrs seminar per week**Pre-requisites:** WRIT212 or WRIT222**Co-requisites:** WRIT329**Assessment:** Portfolios (2 x 30%) 60%; exercise 30%; participation 10%**Subject Description:** This subject will be based around a series of seminars centering on issues such as the uses of history and (auto) biography in fictional texts; inter-textuality and forms of pastiche; lyric subversion; self-referentiality; and the 'writing-over' of existing texts.**WRIT323 Advanced Poetry B 6cp****Autumn/Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture, 2 hrs seminar per week**Pre-requisites:** WRIT213**Co-requisites:** WRIT329**Assessment:** Portfolio 1 30%; Portfolio 2 60%; Participation 10%**Subject Description:** This subject is concerned with narrative poetry: ballads, sequences, dramatic monologues, epics, with the workshoping involving the narratives and/or sequences of the class members.**WRIT328 Writing For Sound 300 – Scoring and Production 6cp****Spring** Wollongong On Campus**Contact Hours:** 1 hr lecture, 2 hr tutorial per week**Pre-requisites:** WRIT228**Co-requisites:** WRIT329**Assessment:** Produced audio text 70%; script/score 30%**Subject Description:** This project-based subject provides students with the opportunity to explore and create texts whose purpose is to be performed/assembled in a recorded environment/format. In an initial series of seminars students will discuss the ongoing development of their own audio texts in the light of specific production stances. Teaching staff will act as both facilitators and technical advisors to students in their creative work. Student work can be either short completed audiotexts or works-in-progress from larger projects, and can be either collaborative (with sound designers and composers) or solo in nature.**WRIT329 Contemporary Theory and the Practising Writer 6cp****Spring** Wollongong On Campus**Contact Hours:** 2 hrs lecture, 1 hr tutorial per week**Pre-requisites:** WRIT319**Co-requisites:** Any WRIT subject**Assessment:** Statement of poetics (draft 15%; final 15%) 30%; case study 1 – 30%; case study 2 – 30%; participation 10%.**Subject Description:** This subject involves case studies of current writers specifically examining the inter-relationship between theory and practice in their work. Students will be required to reflect (both creatively and analytically) on their ongoing writing practice in the light of these texts and to construct a detailed positioning of their own work.

EDUCATION SUBJECT DESCRIPTIONS

EDIT102 Information Technology For A Learning 6cp

Spring Wollongong On Campus
Autumn Loftus On Campus

Subject Description: This subject focuses on the use of information technology tools for both personal and professional use. In terms of personal use, the subject emphasises the need for students to become familiar with a range of applications packages, such as word processing, drawing, spreadsheet and authoring packages. From the professional perspective students will learn about the use of these applications in educational settings, the role of telecommunications, especially the Internet, and study a range of commercial educational software packages.

EDUA111 Creative and Expressive Arts in Early Childhood 6cp

Spring Wollongong On Campus

Subject Description: In this subject emphasis will be given to ways in which the expressive curriculum areas of art, craft, drama and music can be interrelated. Types of teaching and learning processes that will be explored include: aesthetic expression; communication through personal ideas/feelings; and arts appreciation. Cognitive and intellectual concepts through arts activities such as colour, size, rhythm, and melody will be examined.

EDUA201 Creative Arts Education 6cp

Aut/ Spring Wollongong On Campus

Subject Description: This course analyses and interprets the value of the arts and their application to the K-6 classroom setting. Students will: research, compare and interpret music and visual arts in a variety of contexts; identify and prepare appropriate arts education teaching materials; examine possibilities for integrating the arts with other subject areas; and be involved in listening, singing, playing, moving, creating, as well as in the making of art works.

EDUA224 Creative Arts KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUA201

Subject Description: Students will participate in both the art forms of visual arts and music and gain a personal shared meaning and value of aesthetics in the arts. Students will appreciate the role of each art form through making and appraising their own works and the works of others.

EDUA331 Creative Arts KLA Elective II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUA201

Subject Description: In this subject students focus on the interrelation of dance, drama, music and visual arts. The NSW K-6 Creative Arts syllabus will provide the framework for students to understand where commonalities occur across the arts. Cognisance will be given to the uniqueness and integrity of each art form.

EDUA441 Creative Arts Key Learning Area Elective III 6cp

Autumn Wollongong On Campus

Subject Description: Students will engage in listening, creating and performing music as a means of: developing an understanding of how music can be valued in different ways; investigating and developing an understanding of the elements of music; and applying their understandings to the development of sequenced programs of work for the primary classroom.

EDUA442 Creative Arts Key Learning Area Elective IV 6cp

Spring Wollongong On Campus

Subject Description: Students will explore the creative arts key learning area from a visual arts perspective. Students will conceptualise the role of the artist, the researcher and the educator. Students will examine, explore and evaluate current visual arts practices and research.

EDUC213 Educational Psychology in Teaching and Learning 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF111 plus EDUF212 or 12 cp of related 100 level study

Subject Description: This subject will examine theoretical perspectives in educational psychology that focus on encouraging effective teaching and successful learning with school-aged children. Topics include development, cognition, intelligence, motivation, individual differences, personal development and communication in the classroom. Students will be encouraged to consider a variety of relevant theories and to develop an appreciation of the social and cultural contexts within which school children operate.

EDUC217 The Psychology of Exceptional Children 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF111 plus EDUF212 or 12 cp of related 100 level study

Subject Description: This subject will examine the psychological and educational development of exceptional children. Students will be introduced to developmental theories, differing categories of exceptionality, methods for studying children and different methods of identifying exceptional children.

EDUC291 Youth, Culture, Education 8cp

Autumn Wollongong On Campus

Subject Description: This subject will introduce students to the study of youth culture and education. The subject will analyse the impact of changing cultures on youth and education in Australia. Changing social expectations, values and practices of related to youth and the education system will be examined. The central role of language in the construction of identity will be explored. Students will be

required to develop an understanding of youth culture and issues of difference in education. Provision will be made for students to focus on issues relating to a range of age groups, including provision for early childhood.

EDUC292 Gender and Social Justice 8cp

Spring Wollongong On Campus

Subject Description: This subject will examine the relationship between gender, social justice and education. Students will be introduced to the contribution made by feminist theory and research methods to educational practice and policy. Discourses of sexuality, inequality, meritocracy and democracy will be examined through an issues based approach.

EDUC323 Curriculum and Program Evaluation 8cp

Spring Wollongong On Campus

Subject Description: This subject introduces the evaluation of curriculum and programs generally. Students will examine a range of evaluation types, purposes, techniques and examples, and develop skills in critiquing evaluations and devising a program evaluation.

EDUE301 Issues in Aboriginal Education 6cp

Autumn Wollongong On Campus

Exclusions: Not to count with ABST361

Subject Description: This subject provides students with historical and sociological understandings from Aboriginal perspectives of the significant role formal education has played and continues to play as a site of struggle in the process of colonisation. Topics vary, but may include: the history of Aboriginal education in NSW; racial doctrines; individual and institutional racism; Aboriginal cultures, identities and education; various 'models' of Aboriginal education; current policies and issues; self-determination and education.

EDUE302 Aboriginal Pedagogy 6cp

Spring Wollongong On Campus

Exclusions: Not to count with ABST362

Subject Description: This subject canvasses a range of related issues which will help equip students with skills and knowledge related to: designing programs and teaching Aboriginal children, youth and adults in culturally-appropriate ways; and designing programs and teaching all people about Aboriginal Studies. Topics will vary, but may include: differences between Aboriginal education, Aboriginal studies, cultural studies, and anti-racist education; 'Western' and Aboriginal approaches to knowledge, teaching and learning styles, communication styles, and discipline methods; and methods for consulting with Aboriginal communities.

EDUE303 Teaching Language and Literacy Through Literature in Early Childhood 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject focuses on the theory and practice of using a literature based approach in teaching in

the early childhood years (preschool-year 2). The role of literature in developing children's language, literacy and critical thinking will be the primary emphasis. Children's literature discussed will include traditional literature (folktales, fables, myths and legends), picture books, big books, poetry, factual texts, realistic fiction and fantasy. A range of appropriate learning contexts, such as group discussions, drama and writing workshops will be used to model relevant classroom strategies.

EDUE304 Teaching Language Through Literature in the Primary and Middle Years 6cp

Spring Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject focuses on literature suitable for the needs, interests and abilities of middle to upper primary children. A range of literature including poetry, drama (scripted and television), short stories, realistic fiction, fantasy, and non-fiction (information texts, reference books, autobiography, biography) will be treated. A central issue will be 'critical literacy', which includes investigation of social and gender issues in reading and responding to literature, racial and gender biases and stereotyping.

EDUE305 Design and Assessment of Learning Experiences for Adults 6cp

Autumn Wollongong On Campus

Subject Description: This subject focusses on the essential processes in the design of effective learning programs for adults. It is concerned with assessing needs, setting objectives, establishing the scope and sequence of proposed programs, deciding on resources, planning how to assess learner performance and designing an evaluation strategy. Students will be expected to prepare a design statement which addresses a stated problem and reflects their understanding of the instructional design process.

EDUE306 Learning Strategies and Communication in Adult Education 6cp

Spring Wollongong On Campus

Subject Description: This subject introduces students to a range of learning strategies appropriate to adult learners. It is based on a consideration of a basic model of interpersonal communication which will provide one criterion for the evaluation of the strategies. These will be modelled, described and examined throughout the subject so that students may experience and analyse them in order to make informed choices for their own applications.

EDUE307 Physical Education: Coaching and Sport Administration 6cp

Autumn Wollongong On Campus

Subject Description: This subject analyses the general principles of coaching and sport administration. In coaching topics include coaching roles, psychological and physical factors,

programming for all coaching environments and practical sessions. Students also undertake practical work and have the opportunity to complete the Australian Coaching Council Level 1 General Principles. In Sport Administration they have

the opportunity to complete the Australian Society of Sport Administrators Level 1. topics include strategic planning, operations management, financial aspects, legal issues, effective meetings and marketing and promotion.

EDUE308 PDHPE: Health Promotion 6cp

Spring Wollongong On Campus

Subject Description: This subject will examine the concept of health promotion, and will afford students the opportunity to specialise in a specific aspect of health promotion e.g. physical activity or community health. The latest research will be examined to reinforce the notion of health promotion in the community. There will be an emphasis in this subject on students acquiring skills in program development and implementation.

EDUE313 Interactive Multimedia by Design 6cp

Autumn Wollongong On Campus

Pre-requisites: EDIT102 or CSCI101 or CSCI102 or IACT101 or permission of Subject Coordinator

Subject Description: The subject reviews the basic principles of interactive multimedia design and develops a prototype interactive multimedia project using authoring tools. This will entail developing awareness and skills in visual thinking and communicating, an understanding of learning theory, and relevant cognitive and software tools. Issues of project management, rapid prototyping and a critical examination of design, implementation and evaluation will be addressed. Issues of resource management and product maintenance will also be considered.

EDUE314 Interactivity and the WEB (Designing Hypertext Multimedia) 6cp

Spring Wollongong On Campus

Pre-requisites: EDIT102 or CSCI101 or CSCI102 or IACT101 or permission of Subject Coordinator

Subject Description: The subject will apply the principles of instructional design and product development to an interactive web-based environment. The focus will be upon information design for a hypertext environment and the development of an informative and interactive Web Site. This will entail a discussion of project development, software tools for interactive and collaborative Web-Based environment development, the process of rapid prototyping and a critical examination of design issues that define effective sites. To undertake the project students will design an information structure and develop an interface and screen design.

EDUE315 Environmental Education - The Natural Environment 6cp

Autumn Wollongong On Campus

Subject Description: This subject focuses on teaching in natural environments with children from local primary schools. Students will visit local field study centres and schools to engage in teaching and research. They will also be involved in seminar presentations of selected global and local environmental problems relevant to primary school children.

EDUE316 Environmental Education - The Built Environment 6cp

Spring Wollongong On Campus

Subject Description: This subject focuses on teaching in built environments with children from local primary schools. Students will visit urban field study centres and schools to engage in teaching and research. Also students will critically examine local environmental issues that relate to the use of appropriate technology in the built environment.

EDUE317 English Language: Examining Learners' Problems 6cp

Autumn/ Spring Wollongong On Campus

Autumn/ Spring Wollongong Distance

Subject Description: This subject is an introduction to assumptions about the nature of the English language and its relevance to teaching English to speakers of other languages. It will canvass a number of aspects of English grammar and discourse, including differences between spoken and written English, common grammatical problems, teaching vocabulary, and discourse analysis. It will guide participants in the diagnosis of learners' problems in the areas of English grammar, vocabulary and pronunciation.

EDUE319 Programming and Methodology in Second Language Teaching 6cp

Autumn/ Spring Wollongong On Campus

Autumn/ Spring Wollongong Distance

Subject Description: This subject is intended as an introduction to classroom practice in teaching a second language for those with little or no experience in the field. It aims to assist students to develop a teaching program/unit of work appropriate for a specified group of learners. Students will be familiarised with a number of commonly used teaching/learning activities in oral communication, reading and writing.

EDUE320 Behaviour Management 6cp

Autumn/ Spring Wollongong On Campus

Exclusions: Not to count with EDUE311

Subject Description: This elective examines the prevalence and aetiology of behaviour disorders and their effects on classroom learning and community integration. Practical classroom techniques which have been found to be effective in developing a supportive classroom environment and in increasing academic engaged time will be the focus of the subject. The issues of attention deficit hyperactivity disorder, oppositional behaviour, non-compliance, bullying and developing models of student and collegial support will be addressed.

EDUE321 Reading Difficulties 6cp

Autumn/ Spring Wollongong On Campus

Exclusions: Not to count with EDUE312

Subject Description: Both reading acquisition and reading comprehension will be addressed in this subject, with particular reference to those students who do not acquire these essential skills as quickly or as easily as their peers. The assessment of reading skills, including critical phonological skills, and the planning, implementation and

evaluation of an appropriate reading program based on those assessment results, will form the basis of the subject.

EDUE322 Educational Psychology of Atypical Children & Introduction to Educational Measurement 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF111 plus EDUF212 or 12 cp of related 100 level study.

Subject Description: This subject will examine the psychological and educational development of exceptional children. Students will be introduced to developmental theories, differing categories of exceptionality, methods for studying children and different methods of identifying exceptional children.

EDUE323 Educational Psychology of Typical Children 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF111 plus EDUF212 or 12 cp of related 100 level study

Subject Description: This subject will examine theoretical perspectives in educational psychology that focus on encouraging effective teaching and successful learning with school-aged children. Topics include development, cognition, intelligence, motivation, individual differences, personal development and communication in the classroom. Students will be encouraged to consider a variety of relevant theories and to develop an appreciation of the social and cultural contexts within which school children operate.

EDUE324 Gender and Social Justice 6cp

Spring Wollongong On Campus

Subject Description: This subject will examine the relationship between gender, social justice and education. Students will be introduced to the contribution made by feminist theory and research methods to educational practice and policy. Discourses of sexuality, inequality, meritocracy and democracy will be examined through an issues based approach.

EDUE325 Culture, Immigration & Education 6cp

Autumn Wollongong On Campus

Subject Description: This subject will introduce students to the study of youth culture and education. The subject will analyse the impact of changing cultures on youth and education in Australia. Changing social expectations, values and practices of related to youth and the education system will be examined. The central role of language in the construction of identity will be explored. Students will be required to develop an understanding of youth culture and issues of difference in education. Provision will be made for students to focus on issues relating to a range of age groups, including provision for early childhood.

EDUE326 Curriculum and Program Evaluation 6cp

Spring Wollongong On Campus

Subject Description: This subject introduces the evaluation of curriculum and programs generally. Students will examine

a range of evaluation types, purposes, techniques and examples, and develop skills in critiquing evaluations and devising a program evaluation.

EDUE327 Language and Ideology 6cp

Autumn Wollongong On Campus

Subject Description: This subject will examine the ways in which language contributes to the production and reproduction of culture and individual subjectivities. The emphasis will be on students' developing the analytical tools provided by critical discourse analysis, semiotics and systemic linguistics to interpret written, spoken, visual and lived texts.

EDUE328 The English Sound System 2cp

Spring Wollongong Flexible/Dist

Subject Description: For those teaching English as a second language, a knowledge of how the English sound system works is essential, not only to help students pronunciation but also to improve their listening, reading and writing skills. This subject will cover the pronunciation of individual sounds, combinations of sounds, stress patterns and intonation.

EDUE329 Teaching Listening to Second Language Learners 2cp

Spring Wollongong Flexible

Subject Description: This subject provides an introduction to knowledge and skills needed to teach listening. It aims to help students to develop a deeper understanding of listening as an interactive process and from this perspective to develop techniques and procedures for teaching effective listening strategies.

EDUE330 Teaching English in International Contexts 2cp

Spring Wollongong Distance

Subject Description: TESOL has grown into a flourishing profession where the teachers are continuously exposed to a variety of cultures. In the course of cultural contacts, misunderstandings and misconceptions often occur. This subject is designed to better prepare the future TESOL professional to teach English effectively in international contexts. It offers a deeper understanding of cultural, linguistic and educational differences so as to help future teachers become more sensitive to social-cultural issues involved in teaching English in an international context. Students will have opportunities to familiarise themselves with the employment prospect in various countries. However, the major focus of the subject will be on helping the students develop skills and strategies that will allow them to perform appropriately and professionally in international contexts.

EDUE331 Teaching Reading to Second Language Learners 2cp

Autumn Wollongong Flexible
Autumn/Spring Wollongong Distance

Subject Description: TESOL has grown into a flourishing profession where the teachers are continuously exposed to a variety of cultures. In the course of cultural contacts, misunderstandings and misconceptions often occur. This

subject is designed to better prepare the future TESOL professional to teach English effectively in international contexts. It offers a deeper understanding of cultural, linguistic and educational differences so as to help future teachers become more sensitive to social-cultural issues involved in teaching English in an international context. Students will have opportunities to familiarise themselves with the employment prospect in various countries. However, the major focus of the subject will be on helping the students develop skills and strategies that will allow them to perform appropriately and professionally in international contexts.

EDUE332 Teaching Grammar and Vocabulary 2cp

Autumn	Wollongong	Flexible
Spring	Wollongong	Distance

Subject Description: When teaching a second or foreign language, it is important to know a variety of techniques for teaching and assessing grammar and vocabulary. This subject will familiarise students with current views on how to teach grammar and vocabulary and how to select activities that are appropriate to the learning context and the learners age and level of proficiency. The selection of relevant textbooks will also be considered.

EDUE333 International Teaching Project 6cp

Summer 2004/05	Wollongong	On Campus
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Pre-requisites: EDUT111 OR EDUT121

Exclusions: Not to count with EDUE311

Subject Description: This subject is intended as an introduction to teaching in another country and explores issues such as teaching English as a second language, cross-cultural education, materials development and instruction. The major component of this subject will allow students to live and teach in another country (eg Thailand) under the direction and supervision of Faculty of Education staff.

EDUE334 Teaching Writing to Second Language Learners 2cp

Spring	Wollongong	Flexible
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Subject Description: This subject explores methods for teaching writing skills to students for whom English is a second language. It emphasises understanding the problems that ESL learners face as well as developing techniques for helping ESL learners express themselves in written English.

EDUE335 Teaching Speaking to Second Language Learners 2cp

Autumn	Wollongong	Flexible
Spring	Wollongong	Distance

Subject Description: Oral fluency is regarded as key to the learning of a second language. This subject will look at the nature of oral interaction and how it fosters language learning. It will also consider the role of oral presentations and other uses of spoken language. Assessment of spoken language will also be canvassed.

EDUE336 Practicum or Project In Second Language Teaching 6cp

Autumn	Wollongong	Distance
Autumn/ Spring	Wollongong	Flexible

Prerequisites: EDUE319

Subject Description: The Practicum aims to provide the intending language teacher with practical experience in the classroom in order to develop the knowledge and skills needed to become a specialist EFL/ESL teacher. Alternatively, students may elect to undertake an independent project on a topic of interest in language teaching following consultation with their supervisor.

EDUE340 Materials & Technology In Second Language Teaching 6cp

Autumn	Wollongong	Distance
Spring	Wollongong	Flexible/Dist

Subject Description: This subject is intended as a practical introduction to the selection, development, adaptation, analysis and evaluation of a range of teaching materials and media in second language teaching. It will examine the nature and role of materials/technologies, including their place in the curriculum, the assumptions underlying them, and the roles of teacher and learners implied by them.

EDUE401 Issues In Aboriginal Education 6cp

Autumn	Wollongong	On Campus
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Exclusions: Not to count with EDUE301 and or ABST361

Subject Description: This subject provides students with historical and sociological understandings - from Aboriginal perspectives - of the significant role formal education has played and continues to play as a site of struggle in the process of colonisation. Topics vary, but may include: the history of Aboriginal education in NSW; racial doctrines; individual and institutional racism; Aboriginal cultures, identities and education; various 'models' of Aboriginal education; current policies and issues; self-determination and education.

EDUE402 Aboriginal Pedagogy 6cp

Spring	Wollongong	On Campus
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Exclusions: Not to count with EDUE302 and or ABST362

Subject Description: This subject canvasses a range of related issues which will help equip students with skills and knowledge related to designing programs and working with Aboriginal children, youth and adults in culturally-appropriate ways. Topics will vary, but may include: differences between Aboriginal education, Aboriginal studies, cultural studies, and anti-racist education; 'Western' and Aboriginal approaches to knowledge, teaching and learning styles, communication styles, and discipline methods; and methods for consulting with Aboriginal communities.

EDUE405 Assessing Performance In Adult Training 6cp

Autumn	Wollongong	On Campus
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Subject Description: This subject is designed to develop in the student the essential knowledge, skills, understandings and attitudes which will ensure sound evaluation of training

programs. It is directed towards the establishment and consolidation of logical links between evaluation and instructional design and deals with the assessment of trainee performance and current skill levels. Attention is given to examining the importance of language competency in this assessment process. The formative and summative evaluation of training strategies will then contribute to the development of effective performance outcomes.

EDUE406 Theories Of Adult Learning 6cp

Spring Wollongong On Campus

Subject Description: In this subject students will examine relevant theories of cognition and motivation and consider the contributions of several prominent theorists to the study of adult learning. They will investigate learning styles, the characteristics of adult learners, and processes and conditions that promote adult learning.

EDUE407 Inquiry Project In Physical and Health Education 6cp

Autumn/ Spring Wollongong On Campus

Subject Description: The student in consultation with a faculty member will be required to identify an appropriate topic for action research in the Physical Education or Health settings. Each student will plan, conduct and report (approximately 6000 words) on the approved project. Staff will liaise regularly with student and site staff but will not supervise students on site. Group meetings of students will be arranged as necessary.

EDUE408 Placement In Physical and Health Education 6cp

Autumn/ Spring Wollongong On Campus

Subject Description: Students will work in either an applied Physical or Health Education setting. Two hours a week will be spent in the field with one hour a week spent in class.

Students will be required to prepare an in-depth workbook of their practical experience and will also give an in-depth presentation to the rest of the class.

EDUE411 Disability Issues Across the Lifespan 6cp

Autumn Wollongong On Campus

Subject Description: This subject will examine issues which face individuals with moderate to severe disabilities throughout their lives. It will address the Disability Services Act and Service Standards; personal care; family impact; community access and support; accommodation options; vocational and recreational opportunities; sexuality; legal and ethical issues; augmentative communication; aging and advocacy.

EDUE412 Programming for Individuals with Moderate to Severe Disabilities 6cp

Spring Wollongong On Campus

Subject Description: This subject will address needs assessment and the design, implementation and evaluation of programs for individuals with moderate to severe intellectual disabilities as a result of Down Syndrome, Autism, neural tube defects, traumatic brain injury, severe cerebral palsy, and

other developmental disabilities. The development of communication and social skills, independent living skills and intellectual growth will be addressed within the context of promoting individual rights and enhancing opportunities for participation in society.

EDUE413 Managing Multimedia Resources 6cp

Autumn Wollongong On Campus

Subject Description: This subject focuses on skill development to manage multimedia resources. It begins with the development of an information management system to monitor and store project resources. This evolves into resource production and ongoing team communication via the web and chat spaces. The collection of resources requires careful organisation prior to its storage on CD. Students are required to keep a process journal to enable reflection and analysis of the information management cycle they have experienced.

EDUE414 Cognition, Interface and Interactivity 6cp

Spring Wollongong On Campus

Subject Description: This subject explores the relationship between interactive multimedia and the meanings that it can create. It will include a discussion of the psychology of interactive design, the role of non-linear narrative and navigation options. It will explore several strategies of interaction. In particular it will examine popular genres within interactive multimedia such as games and simulations and how the interface conventions are established and learned.

EDUE415 School and Community Based Sustainable Development Practices 6cp

Autumn Wollongong On Campus

Subject Description: In this subject students will critically examine the practices that communities, schools and government authorities employ to support sustainable development. Students will critically evaluate the education potential of various projects in sustainable development examples include Sydney's Sustainable House, Permaculture and the Sustainable Energy Development Authority.

EDUE416 Environmental Education Through Information Technology 6cp

Spring Wollongong On Campus

Subject Description: In this subject students will critically examine how information technology presents environmental issues. Teaching methods employed in this subject will make appropriate use of information technology. students will also be involved in the development of a suitable information technology resource for teaching about environmental education.

EDUF104 Early Childhood Learning Environment I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUT121

Subject Description: This subject introduces students to theories of play - how play develops and changes; its contribution to children's development; play as an approach to

learning; play and children's texts; and sociocultural variations. Ways of observing, documenting, interpreting, planning, implementing and assessing children's play will also be developed. The subject will be presented through lectures, seminars, and self-directed study in groups.

EDUF106 Child Development and Care I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF111

Subject Description: This subject follows on from EDUF111. The focus is on child development theories, principles, research and observational methods and how they relate to the study, education and care of young children from 0-8 years.

EDUF111 Education I 6cp

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Bateman's Bay On Campus

Autumn Bega/Moss Vale On Campus

Autumn Loftus On Campus

Summer 2004/05 Wollongong On Campus

Subject Description: This subject involves a study of physical, social, emotional, moral and cognitive aspects of children from a developmental perspective. It will deal with the following topics: issues and theories in child development; the physical development of children and adolescents; contrasting theories of cognitive development; theories of language development; the nature of intelligence and its relation to achievement; social contexts for development; moral and emotional development; and gender-role development.

EDUF201 Early Childhood Learning Environment II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF104

Subject Description: This subject will enable students to study the relationship of theory and practice in terms of the basic principles of program planning and implementation of an early childhood education program for young children and their families. Students will participate in micro teaching experiences as well as teaching practice in an early childhood centre under the supervision of a trained teacher.

EDUF204 Learners With Exceptional Needs 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF111 OR EDUF101

Subject Description: This subject will cover the prevalence of children with special educational needs, the concept of normalisation and the current educational policies of mainstreaming, integration and inclusion. It will develop an understanding of the needs of exceptional learners and basic skills in the individualisation of instruction in relation to students with learning difficulties in the regular classroom.

EDUF212 Education II 6cp

Spring Wollongong On Campus

Spring Loftus On Campus

Pre-requisites: EDUF111

Subject Description: This subject identifies and examines the major theories, perspectives and methodologies which support a critical awareness and understanding of issues of consequence in education in society. The role of education in gender, class and race relations is considered and students explore contemporary issues such as: inclusion of the differently abled student; violence in schools and families; changing perceptions of sexualities; and the use and critique of technology and mass media.

EDUF232 Early Intervention and Children with Special Needs 6cp

Spring Wollongong On Campus

Subject Description: This subject examines various factors which put the young child at risk of developmental delays or disabilities, and develops management, care and teaching strategies which are appropriate for young children with special needs. The roles of parents, associated professionals and paraprofessionals in the education of young children with special needs are also addressed.

EDUF252 Child Development and Care II 6cp

Spring Wollongong On Campus

Pre-requisites: EDUF106

Subject Description: This subject extends the knowledge and skills gained in previous developmental studies by examining particular contexts and situations in early childhood education. These include: child abuse and neglect, health and safety management, evaluation of policies and practices, evaluation of government regulations, working with families; and current issues. Students will apply child development theories and principles to evaluation and critical analysis of a variety of specified situations and contexts and engage in reflective thinking.

EDUF303 Early Childhood Learning Environment III 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF201

Subject Description: This subject will focus on the physical, social, emotional & intellectual learning environments in early childhood settings. Students will examine the role of the early childhood teacher and take into account the diverse nature of the population and the importance of parent teacher relationships.

EDUF304 Early Childhood Curriculum 12cp

Spring Wollongong On Campus

Pre-requisites: EDUF201

Subject Description: The compulsory core of this subject examines different ways of conceptualising curriculum, and processes and approaches involved in curriculum planning in various early childhood settings. Students will be able to choose a specialisation within this subject, focusing on 0-3s,

3-5s or 5-8s. In this specialisation, students will be involved in collaborative inquiry into relevant curriculum policies and practices, and apply the findings of this inquiry to designing programs.

EDUF311 Education III 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF101 OR EDUF111

Subject Description: This subject is designed to provide students with an understanding of current research related to the major theories of cognitive development and the impact of these theories on contemporary teaching practice. The topics treated will include: information processing theories of cognitive functioning; metacognition and learning; Piaget and the neo-Piagetians; Vygotskian theory; theories of intelligence and creativity; psychological perspectives on motivation; and, cognitive development as a social and cultural process.

EDUF313 Historical and Philosophical Perspectives of Early Childhood 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF212

Subject Description: This subject will critically examine the importance of early childhood education, perspectives on childhood in different historical contexts, the roles of children and families in learning and schooling, and childrearing practices in different historical and societal contexts. The impact of historical changes and philosophical shifts upon the world of the child and upon the development of early childhood services and programs will be considered.

EDUF353 Management of Early Childhood Services 6cp

Autumn Wollongong On Campus

Subject Description: This subject will prepare early childhood educators to fulfil the roles of organizational communicator, leader, teamworker, (action) researcher, and supervisor of staff. Topics -as they relate to early childhood professionals- such as industrial issues, human resources management, change management effective communication, legal responsibilities, use of technology in services management, personal career management, and contextual issues will be covered. The delivery strategy of self directed teamwork will provide practical experience in group dynamics, conflict resolution, team building and leadership.

EDUF421 Leadership and International Perspectives In Education 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject examines early language development, including emergent literacy, reading contexts at home and school, the shift from oral to written modes, early writing, early reading, spelling and phonology. Students will become familiar with a range of teaching/learning activities designed to cater for the language and literacy needs of a variety of learners, including those of non-English-speaking background and those with literacy difficulties.

EDUL101 Language and Literacy Education I 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject examines theoretical foundations and develops practical strategies for the teaching of reading. It examines the relationships between reading, writing and oral language development and explores the knowledge and strategies readers use to make meaning from both literary and factual texts. Students will become familiar with the developmental patterns of emergent, beginning and fluent readers and the respective teaching and assessment strategies.

EDUL202 Language and Literacy Education II 6cp

Spring Wollongong On Campus

Contact Hours: 3 Hours per week.

Pre-requisites: EDUL101 - Language & Literacy Education I

Subject Description: This subject examines theoretical foundations and develops practical strategies for the teaching of writing. It examines the relationship between reading, writing and oral language development and explores the knowledge and strategies writers use to compose the range of literary and factual texts. Students will become familiar with the developmental patterns of emergent, beginning and fluent writers and the respective teaching and assessment strategies.

EDUL224 Language Education KLA Elective I 6cp

Spring Wollongong On Campus

Contact Hours: 3 Hours per week. per week.

Pre-requisites: EDUL101

Subject Description: This subject will focus indepth on Early Stage 1 & Stage 1 of the English K-6 Syllabus. It will examine the relationship between the outcomes, assessment of literacy learning, the design and implementation of learning activities, and the creation of effective classroom settings. It will examine a range of teaching/learning activities and the use of time, resources, that K-2 teachers use to plan, implement and evaluate their literacy curriculum.

EDUL240 Materials Technology In Second Language Teaching 6cp

Not on offer in 2004

Subject Description: This subject is intended as a practical introduction to the selection, development, adaptation, analysis and evaluation of a range of teaching materials and media in second language teaching. It will examine the nature and role of materials/technologies, including their place in the curriculum, the assumptions underlying them, and the roles of teacher and learners implied by them.

EDUL301 Language and Literacy Studies in Early Childhood 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 3 Hours per week.

Pre-requisites: EDUL101

Subject Description: This subject examines language and literacy development in the early childhood years. Topics include: early spoken language development; emergent

literacy development; later reading and writing development; the role of picture books in children's lives; and the relationship between development and children's learning environments. Teaching strategies for supporting children's talk, reading and writing will be addressed. Students will be involved in conducting independent inquiry in teams into aspects of children's language and literacy development.

EDUL312 Understanding Literacy Needs of Adolescents 6cp

Spring Loftus On Campus

Subject Description: This subject will examine the characteristics and needs of adolescent students and in particular adolescent literacy. It will explore the social, emotional, intellectual and physical developmental period of adolescence and examine specific issues of identity, peer acceptance, independence, social and political awareness and how these characteristics relate to adolescent literacy development and specifically to the learning and teaching of mathematics and science. What literacy is and the role it plays in learning will be demonstrated. Practical classroom strategies and techniques will be introduced that will enhance the learning experiences of the adolescent student.

EDUL314 Language and Ideology 8cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject will examine the ways in which language contributes to the production and reproduction of culture and individual subjectivities. The emphasis will be on students' developing the analytical tools provided by critical discourse analysis, semiotics and systemic linguistics to interpret written, spoken, visual and lived texts.

EDUL330 Practicum or Project In Second Language Teaching 6cp

Not on offer in 2004

Pre-requisites: EDUE319

Subject Description: The Practicum aims to provide the intending language teacher with practical experience in the classroom in order to develop the knowledge and skills needed to become a specialist EFL/ESL teacher. Alternatively, students may elect to undertake an independent project on a topic of interest in language teaching following consultation with their supervisor.

EDUL335 Language Education KLA Elective II 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Pre-requisites: EDUL202

Subject Description: This subject will focus in depth on Stage 2 & Stage 3 of the English K-6 Syllabus. It will examine the relationship between the outcomes, assessment of literacy learning, the design and implementation of learning activities, and the creation of effective classroom settings. It will examine a range of teaching/learning activities and the use of time, resources, that Year 3-6 teachers use to plan, implement and evaluate their literacy curriculum.

EDUL441 Language Education Key Learning Area Elective III 6cp

Autumn Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject will focus on the world wide movement towards Standards, Profiles and Benchmarks as tools of accountability and identification of student levels of literacy achievement, and for planning future teaching learning experiences in literacy education. The history, development and politics of such tools will be examined. A basic component of study will be the assessment and evaluation theory that students need to understand, including knowledge of quantitative and qualitative methods, in order to make valid judgments of students literacy levels. Finally students will learn how they can use the data gathered to plan future teaching/learning experiences that best respond to the needs of their students.

EDUL442 Language Education Key Learning Area Elective IV 6cp

Spring Wollongong On Campus

Contact Hours: 3 Hours per week.

Subject Description: This subject will take the form of a school based inquiry project into some aspect of literacy education.

Students will be asked to identify a problem worthy of inquiry, develop a needs analysis and proposal; carry out a literature review in the area; carry out action research and data collection and finally write a brief report presenting the findings.

EDUM201 Mathematics Education I 6cp

Autumn Wollongong On Campus

Exclusions: Not to count with EDUM102

Subject Description: This subject focuses on the teaching and learning of K-6 mathematics, based on the NSW K-6 syllabus and the National Statement on Mathematics. The subject requires students to develop a rationale for teaching mathematics, to examine approaches to teaching the content of infants and primary school mathematics, and emphasises the theoretical underpinnings both of the structure and sequence of the curriculum, and of specific teaching and learning strategies.

EDUM224 Mathematics Education KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUM102 or EDUM201

Subject Description: This subject will focus on the development of content and activities for teaching units and extensions of the K-6 Mathematics syllabus. Topics include topology, tessellations, number patterns, fractals, probability, geodesics, polyhedrons and mathematics in our environment. Students will be expected to present an overview of the extension strands and prepare a sequence of lessons related to them.

EDUM333 Mathematics Education Elective II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUM102 or EDUM201

Subject Description: This subject will focus on the underlying issues which have been given emphasis in the structuring of the Mathematics K-6 syllabus and the National Statement. Areas to be considered will include technology, language, gender, multiculturalism, problem solving, attitudes to mathematics and children with special needs. The subject will extend the work done in EDUM102.

EDUM441 Mathematics Education Key Learning Area Elective III 6cp

Autumn Wollongong On Campus

Subject Description: This subject will apply various means to evaluate the resources available to enhance and enrich the K-6 curriculum. It will investigate computer software, textbook series and mathematics laboratories.

EDUM442 Mathematics Education Key Learning Area Elective IV 6cp

Spring Wollongong On Campus

Subject Description: This subject will employ theoretical models of learning in mathematics to evaluate and prepare programs and units of work related to the K-6 mathematics curriculum. The subject will look in particular at the theories of Dienes and Skemp for their validity. Extensive use will be made of the testing facilities available on the Web to support this program.

EDUP123 Movement Concepts and Practices 6cp

Autumn Wollongong On Campus

Subject Description: Health and Physical Education teachers have a major role to play in the promotion of physical activity in both schools and the general community. Physical activity contributes to quality of life, and develops fitness as well as motor skills. There are a range of experiences that people can participate in to ensure a lifelong commitment to regular physical activity. In this subject students will participate in practical experiences which will explore the fundamental principles underlying all movement and identify how these principles impact on the development of specialised skills. The health and skill related elements of physical fitness will be examined from both a theoretical and practical perspective. As the first subject in the practical studies component of the course students will be introduced to teaching strategies which can be implemented when teaching games, dance and fitness.

EDUP124 Skill Analysis and Performance I 6cp

Spring Wollongong On Campus

Subject Description: Movement experiences in this subject will consolidate and extend students' knowledge and understanding of physical activity and the principles underlying movement. These principles will be applied to specialised skills in aquatics, gymnastics and the invasion games of touch football, oztag, and rugby. Students will develop their own level of performance in these specialised areas of physical activity, as well as further their

understanding of teaching strategies which can be utilised when implementing these activities in schools.

EDUP144 Health and Health Behaviour 6cp

Spring Wollongong On Campus

Subject Description: This subject is the first in a series of subjects which examine major issues from a socio-cultural and individual perspective. In this subject models of health behaviour will be critically examined in relation to the major lifestyle factors in the disease process. The nature of disease and the major risk factors will be addressed. The subject culminates with an exploration of nutrition as a dimension of health. A Web site has been constructed for this subject, with subject resources and Web links, and as a support for tutorial activities which may be conducted on line.

EDUP153 Foundations of Personal Development Health & Physical Education 6cp

Autumn Wollongong On Campus

Subject Description: Students will examine the theoretical foundations and rationale for the inclusion of Personal Development, Health and Physical Education within both the primary and secondary curriculum. The basic principles of teaching related to communication, lesson planning, classroom management and reflection will be discussed and practised in outdoor and indoor micro teaching contexts as preparation for the first practicum component of 10 days, which will take place in the primary school setting.

EDUP201 Personal Development, Health and Physical Education 6cp

Autumn/ Spring Wollongong On Campus

Subject Description: This subject will introduce students to the Key Learning Area: Personal Development, Health and Physical Education. This KLA has an important role to play in the health promotion of young people. Students will examine basic movement skills, body awareness and communication through physical activity. Personal Development and Health will deal with aspects of growth and development, interpersonal relationships, healthy decision making, safe practices and the Health Promoting School.

EDUP223 Skill Analysis and Performance II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUP123

Subject Description: Students will further their knowledge and understanding of the principles and practices involved in the development of specialised skills in social dance, the invasion games of hockey and soccer, and gymnastics. Students will further their own skill level in each content area covered, as well as examine the considerations for teaching these activities in schools. Through participation in a variety of practical and theoretical experiences students will further their ability to utilise a variety of teaching strategies when implementing Physical Education lessons in these content areas.

EDUP224 Skill Analysis and Performance III 6cp**Spring** Wollongong On Campus**Pre-requisites:** EDUP123

Subject Description: In this subject students will continue to increase their knowledge and understanding of content areas taught in the Physical Education component of the PDHPE Syllabus. Students will experience the invasion games of netball and basketball, group exercise activities such as aerobics and aquarobics, orienteering and track and field. Combining the experience they have had in practice teaching and the knowledge gained through a variety of theory and practical subjects, students will further their ability to plan and implement appropriate Physical Education lessons. Students will focus on continuing to improve their own personal performance and as well as the selection of strategies to meet the special needs of individuals, create active participation, and to challenge and extend each student's capabilities in Physical Education.

EDUP226 Personal Development, Health and Physical Education KLA Elective I 6cp**Spring** Wollongong On Campus**Pre-requisites:** EDUP201

Subject Description: This subject will enable students to further develop the knowledge, understandings and pedagogical skills introduced in EDUP201 Personal Development, Health and Physical Education. The major focus of the subject will investigate factors which impact upon the individual in relation to their physical activity levels and health status. The content introduced in lectures will be supplemented by PDHPE teaching experiences in a primary school setting

EDUP243 Exploring Emotional Well Being 6cp**Autumn** Wollongong On Campus

Subject Description: This subject will further develop students knowledge and understanding of "health " by exploring the psychosocial dimension of our health and the impact it has on our total well-being. In identifying the criteria for good mental and emotional health, this subject will discuss self-esteem and self-concept, stress and stress management, communication, and interpersonal relationships. Interpersonal communication skills are integral to the formation of social relationships, to helping others in need and for dealing with conflict. The course will investigate the importance of effective communication in developing a positive perspective of self, and positive relationships with others in various settings. As future secondary teachers the promotion of adolescent well-being and in particular adolescent mental health is an important issue, and will therefore be an underlying focus throughout this subject.

EDUP246 Risk Taking and Young People 6cp**Spring** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level**Exclusions:** Not to count with EDUP344

Subject Description: This subject will focus on risk taking behaviour, in the context of young people's lives and culture, with specific reference to drug taking, suicide, and accidents. Current trends in prevention, intervention, postvention, and harm minimisation, will be dealt with. At the conclusion of this

subject, students should have acquired a sound knowledge base, which will enable critical examination of the underlying psycho-social factors associated with drug use, suicide ideation and other risk taking behaviours.

EDUP255 Teaching Physical Education 6cp**Autumn** Wollongong On Campus**Pre-requisites:** EDUP153

Subject Description: This subject builds on previous studies of the nature of the learner and the learning environment in Physical Education. Opportunities will be provided for students to explore the variety of teaching/learning strategies available, their advantages and disadvantages, the criteria for their selection and their contribution to classroom communication. Students will be given the opportunity to apply their knowledge by participating in field experiences during the session.

EDUP256 Teaching Health Education 6cp**Spring** Wollongong On Campus**Pre-requisites:** EDUP153

Subject Description: This subject investigates teaching and learning in Health Education. Students will initially explore and analyse a variety of health behaviour theories and explore Health Education in secondary schools as a form of health promotion.

The understandings which are developed will then be related to a variety of teaching and learning opportunities which exist in Health Education in secondary schools given the diverse nature of schools and learners. Health Education demonstration lessons will enable students to observe and reflect upon the teaching of experienced Health Education teachers. This is followed by a one week practicum in a secondary school which will enable students to apply the theories of teaching Health Education to a practical setting

EDUP301 Issues In Health & Physical Activity 6cp**Autumn** Loftus On Campus

Subject Description: All teachers irrespective of subject area have a responsibility for the physical, social and emotional well-being of their students. This subject will focus on personal development, health and physical education issues which impact on the welfare and health status of young people. Issues in personal development/health would include: mental health, depression, eating disorders, suicide, drug use, and sexuality. In the physical activity area, the focus would be on increasing students confidence. This would be achieved by: increasing knowledge of a variety of sporting activities; developing organisational skills necessary for conducting an efficient physical activity or sports session; and reinforcing an understanding of risk management in external environments.

EDUP311 Principles & Practices of Coaching 6cp**Spring** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level

Subject Description: This subject analyses the basic principles and practices of coach education. The emphasis will be placed on an understanding of the Australian Coaching

system and pedagogical issues in coach education. Related issues to coaching such as time management and ethical issues will also be studied. Relevant discipline areas such as physiology and sports psychology will also be applied to coaching. On completion of the subject students will have acquired a General Principles of Coaching certification.

EDUP312 Coaching Practicum 6cp

Not on offer in 2004

Pre-requisites: 24 cr pts at 200-level

Subject Description: Students will work with a recognized coach in an applied setting. Students will be required to organise and run practice sessions for a minimum of 30 hours. Two hours per week will be spent in the field with one hour a week spent in lectures analysing the principles of coaching. Students will be required to prepare an in-depth workbook of their practical experience and will also give an in-depth presentation to class members.

EDUP313 Advanced Coaching & Administration 6cp

Not on offer in 2004

Pre-requisites: EDUP311 OR EDUP312

Subject Description: This subject provides the opportunity for students to advance their knowledge in the theoretical aspects of coaching and sport administration. In coaching the disciplines will be applied to the sports coaching environment. Students will also be required to undertake a General Principles (Level 2) coaching qualification. The Sports Administration components related to coaching will also be studied: strategic plans, development, sponsorship etc. Applications of theory will also be studied over the duration of the subject.

EDUP323 Advanced Skill Analysis I 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUP123

Subject Description: The students practical experience in racquet games; games such as cricket, softball and baseball, aquatics (AUSTSWIM); and modern and contemporary dance will be further developed with continuing emphasis on teaching strategies, processes, planning and evaluation.

EDUP324 Advanced Skill Analysis II 6cp

Spring Wollongong On Campus

Pre-requisites: EDUP123

Subject Description: This subject offers an extension of students' prior work in practical studies through experiences with a games sense approach, and the choreography and performance of dance, gymnastics and aerobics routines. The emphasis will be on unit planning, processes and the methodology of teaching in the areas of artistic and display gymnastics, soccer and canoeing, kayaking and camping.

EDUP333 Motor Learning 6cp

Autumn Wollongong On Campus

Subject Description: This subject is designed to develop an understanding of concepts related to skill acquisition and the psychology of sport. Through a variety of practical laboratories, seminars, workshops and lectures, students will be able to identify basic models of information processing,

memory and attention; identify stages of learning and appropriate methods of instruction and use practice variables, feedback, transfer, psychological techniques programmed instruction and mechanical aids to enhance the teaching of motor skills.

EDUP335 Personal Development Health and Physical Education KLA Elective II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUP201

Subject Description: This subject will expand knowledge and skills in the Key Learning Area of Personal Development, Health and Physical Education. The concept of the health promoting school will be analysed, particularly as it relates to the school/community interface. Content and understandings will be examined from a strong pedagogical base, and students will develop appropriate teaching strategies and approaches which can be applied to both the school and community settings.

EDUP346 Sexuality, Identity And Relationships 6cp

Spring Wollongong On Campus

Subject Description: Human sexuality is an integral component of syllabuses in primary and secondary school education. Education in human sexuality involves a number of dimensions including factors that relate to a person's sexual identity, orientation and behaviour. On completion of this subject, students will have critically examined the biological, social, psychological and ethical/moral dimensions of human sexuality. In addition students will have acknowledged how sexuality programs can be designed to be more inclusive in order to cater for diversity.

EDUP355 Curriculum Perspectives and Issues 6cp in Physical & Health Education

Spring Wollongong On Campus

Pre-requisites: 24 cr pts at 200-level

Subject Description: This subject will enable students to develop an understanding of the foundations of curriculum development as it relates to PDHPE. A particular focus will be placed upon PDHPE in a post compulsory education setting. These understandings will be achieved by engaging students in an analysis of state and national curriculum models that have relevance to PDHPE. Students will critical analyse contemporary issues that impact upon the PDHPE curriculum as well as undertake curriculum planning and development tasks. At the completion of this subject students will undertake a 3 week block practicum in a secondary school.

EDUP361 Progress and Issues in Health and Health Promotion 6cp

Not on offer in 2004

Pre-requisites: 24 cr pts at 200-level

Subject Description: On completion of this subject students will have critically examined the modern concept of health and factors affecting health status. Students will have investigated the scientific basis for health promotion and the research underpinnings associated with health promotion; health behaviour and health behaviour change.

EDUP362 Issues in Drug Education 6cp**Autumn** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level

Subject Description: This subject provides for the examination and development of individual knowledge, skills and attitudes which will facilitate the drug education process. Content will include: drug use trends and issues; behavioural theories of drug use and dependence; perspectives on individual and societal attitudes to drug use; and the development of skills and programs relevant to providing meaningful drug education for young people, particularly in relation to the harm minimisation approach.

EDUP363 Stress Management 6cp**Spring** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level

Subject Description: This subject will explore the elements of mental health and their relationship to stress. The concept of stress will be examined as well as the theory of stress management. On successful completion of this subject, students will have conducted a stress management workshop. As well students will have identified and evaluated various stress management techniques and explained reasons why individuals may deviate from good health practices.

EDUP366 Independent Project in Physical and Health Education 6cp**Autumn/ Spring** Wollongong On Campus**Pre-requisites:** EDUP391 or EDUP 332

Subject Description: This subject will provide students with the opportunity to engage in an individual project with close guidance through the stages of the project. The project may take a variety of forms including: working with health or sport groups or organisations; an action research project in a school or community setting; investigating a particular social phenomenon; developing a product using hypermedia or video and developing an piloting an honours proposal.

EDUP367 Sports Studies II 6cp**Spring** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level

Subject Description: This subject provides the opportunity to select 2 of 4 sport areas:- Games for understanding; Water Polo (team); Nordic/Alpine skiing (recreational); Accreditation/Certificate NCAS level I , II or III or Instructor/Examiner by contract with a supervisor. The opportunity to perform and teach basic skills, develop leadership, social skills and an understanding and appreciation of recreational and survival strategies of our wilderness arising from Nordic/Alpine skiing will be provided.

EDUP368 Fitness Assessment and Exercise Prescription 6cp**Spring** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level

Subject Description: This subject is designed to integrate theoretical concepts with practical experiences to reinforce an understanding of the components of fitness and health. This will result in autonomous decision making to enhance a healthy lifestyle.

The ability to plan, implement and evaluate exercise programs through understanding the role of nutrition and exercise in stress management and alleviating the degenerative effects of hypokinesia will be developed.

EDUP381 Outdoor Education 6cp**Autumn** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level

Subject Description: This subject is designed to introduce students to the pedagogical concepts of outdoor education and recreation. Specific content will examine aims, objectives and examples of outdoor education programs with an emphasis on school based programs. By the conclusion of the subject students will exhibit practical skills such as route planning, navigation, campsite and equipment selection.

EDUP382 Leadership and Management Skills in Outdoor Education 6cp**Spring** Wollongong On Campus**Pre-requisites:** EDUP381

Subject Description: This subject is designed to introduce students to leadership, administration and managerial aspects involved in outdoor education and recreation. Specific content will examine various styles of leadership in outdoor education programs in a variety of educational contexts. Practical skills such as setting up abseiling and rock climbing systems and preparing for, and conducting, major expeditions are used as a vehicle to integrate theory and practice.

EDUP391 Research and Evaluation in Physical and Health Education 6cp**Autumn** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level

Subject Description: This subject will provide students with a introduction to the different approaches used in research and evaluation in physical education and related fields. For each of these approaches the following aspects will be examined: underlying assumptions; planning the research or evaluation; collecting, analysing, interpreting data and reporting findings; ethical issues involved in the research or evaluation process. Students will also be introduced to the use of statistics in research and evaluation.

EDUP392 Social and Cultural Perspectives in Physical Activity and Phys Ed 6cp**Autumn** Wollongong On Campus**Pre-requisites:** 24 cr pts at 200-level

Subject Description: This subject examines physical education as a curriculum area which has changed over time in relation to different political and social circumstances. It provides students with the opportunity to investigate how physical education is influenced by and influences Australian culture. Specific topics to be investigated in the context of sport and the teaching of physical education include: ethnicity, youth culture, gender, the body and the commodification of physical activity.

EDUP430 Project in Physical and Health Education 12cp

Annual Wollongong On Campus

Subject Description: A report or major essay is required to satisfy the requirements for this subject. The topic is to be approved by the subject coordinator. The final project may take the form of: (a) a report of original work performed by the student; (b) a theoretical investigation of a research related problem; (c) a multimedia presentation of a physical or health education topic.

EDUP435 First Aid and Sports Medicine 6cp

Spring Wollongong On Campus

Subject Description: The health and physical education teacher has a diversity of roles and responsibilities within the school environment. They not only have the responsibility to deliver safe and effective physical education and sport programmes, but must also educate students in injury prevention and first aid. Consequently, it is essential that they have a sound knowledge in both the theoretical and practical aspects of first aid and sports medicine. This course is designed to give students the knowledge and skills to prevent, assess, and treat injuries; and prepare them to teach first aid in the 2 Unit PDHPE Preliminary Core, sports medicine in the 2 Unit PDHPE HSC Course, and first aid/injury prevention components in the K-6 and 7-10 PDHPE syllabi. Students have the option in this course to pay an additional cost and complete a combined Level 1 Sports First Aid and Level 1 Sports Trainer accreditation from Sports Medicine Australia.

EDUP441 PDH&PE Key Learning Area Elective III 6cp

Spring Wollongong On Campus

Subject Description: This subject looks at advanced programming and planning in Physical Education and the contribution of PE to the overall development of children. Issues such as legal aspects and administrative procedures related to primary school physical events such as carnival organisation will be covered. The game centered approach is analysed in great depth from both a theoretical and practical perspective. Students will also participate in practical in school sessions.

EDUP444 PDH&PE Key Learning Area Elective IV 6cp

Autumn Wollongong On Campus

Subject Description: The basis of this subject is an investigation of the health promoting schools concept. Specific content will vary according to the needs/interests of the group, but will include some of the following: programming for PD/Health; "healthy school" projects; children with special health needs - asthma, diabetes, epilepsy, cancer; dealing with crises in classrooms e.g. protective behaviours, conflict resolution, assertiveness, bullying, violence; issues in sexuality; grief and loss; death education.

EDUP446 Contemporary Health Issues 6cp

Spring Wollongong On Campus

Subject Description: In recent years it has become increasingly difficult to deal with health problems inherent in the community, many of which are the result of the complex

interaction between psychosocial, sociological, political and environmental factors. This subject will examine important community health issues, including consumer and environmental health and identify specific agencies (including the health promoting school), which assist the community to achieve and sustain a supportive environment for health.

EDUP447 Sports Studies I 6cp

Autumn Wollongong On Campus

Subject Description: This subject provides the opportunity for students to select 2 of 4 sports areas:- Skin and Scuba Diving (recreational): Advanced composition, choreography and performance in dance, gym: aerobics: aquarobics: Accreditation or Certification e.g. NCAS I, II or III or an Instructors or Examiners e.g. fitness Outdoor Education by contract with a supervisor. On successful completion of the subject students will be able to demonstrate a variety of skills in selected sports areas, apply appropriate teaching techniques, provide leadership and develop an understanding of the physical and recreational benefits and safety precautions of the fragile underwater environment.

EDUP453 Professional Studies in PDH&PE 6cp

Autumn Wollongong On Campus

Subject Description: This subject will conclude studies in the curriculum and pedagogy strand by focusing on the professional preparation of final year student teachers in PDHPE. Students will engage in critically analysing, investigating and reflecting as a means of: developing an understanding of the policies and structures for PDHPE in Post Compulsory Education, with a focus on programming and assessment; investigating and experimenting with advanced and innovative teaching strategies in PDHPE, including design of WEB based material: and critiquing selected philosophies in education and Physical and Health Education with a view toward formulating a personal teaching philosophy.

EDUP454 Physical and Health Education Extended Practicum 6cp

Autumn Wollongong On Campus

Subject Description: This final teaching practice is designed to provide an extended teaching experience which approximates the work of a full time secondary Health and Physical Education teacher. The extended period of practice enables the student to bring together teaching and curriculum development skills, with students taking responsibility for programming, implementing and evaluating appropriate sequences of learning experiences for children based on their developmental needs and learning styles.

EDUP491 Theory and Application of Special Ed 6cp in P&HE

Autumn Wollongong On Campus

Subject Description: This subject will analyse the contribution that Physical and Health Education can make to responding to students with a wide range of learning needs. On completion of the subject students will have developed basic skills in the individualisation of instruction, analysed and evaluated theoretical issues underpinning the education of learners with exceptional needs and critically evaluated

current trends in relation to the policies of integration in schools and the community.

EDUP492 Leadership and Management in Physical and Health Education 6cp

Spring Wollongong On Campus

Subject Description: Students will be introduced to the nature and scope of leadership and management in physical and health education and sport. The subject will focus on current and future issues of leadership and management of staff and event management with other significant responsibilities related to both education departments and community sporting organisations also discussed.

EDUS102 Science and Technology Education 6cp

Spring Wollongong On Campus

Subject Description: This subject develops teaching skills that support constructivist based learning in science. It examines some of the ideas children have about energy, motion, electricity, time and space, and the environment so that pre-service teachers can appreciate some of the prior conceptions children bring to their own learning situations in science.

EDUS104 Human Society and its Environment 6cp

Spring Wollongong On Campus

Exclusions: Not to count with EDUS203

Subject Description: This subject is concerned with developing an understanding of the nature and importance of an integrated humanities course within the primary school curriculum. It focuses on the Australian content for this KLA and on raising awareness of appropriate methodologies and choices of content for each year level. HSIE is a key KLA for the examination of attitudes and values and this informs the work undertaken in this subject.

EDUS122 Science and Mathematics in Early Childhood I 6cp

Autumn Wollongong On Campus

Subject Description: This subject examines some of the basic concepts associated with science topics associated with energy, electricity, and environmental education. They will also examine relevant aspects of the current Mathematics K-6 syllabus that apply to children under 8 years of age. Students then critically evaluate a range of approaches to the instruction of young children in science and mathematics.

EDUS203 Human Society and its Environment 6cp

Autumn Wollongong On Campus

Exclusions: Not to count with EDUS104

Subject Description: This subject is concerned with developing an understanding of the nature and importance of an integrated humanities course within the primary school curriculum. It focuses on the Australian content for this KLA and on raising awareness of appropriate methodologies and choices of content for each year level. HSIE is a key KLA for the examination of attitudes and values and this informs the work undertaken in this subject.

EDUS213 Science and Maths in Early Childhood II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUS122

Subject Description: This subject is designed to provide preservice teachers in the field of early childhood with practical experience in planning, implementing and evaluating learning experiences in mathematics and science that will contribute to the development of skills, concepts and values in young children. Emphasis is placed on providing developmentally appropriate experiences for young children, including child-centred learning that directly links to hands-on experiences related to events and materials in the immediate environment.

EDUS224 Science and Technology Education KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUS102

Subject Description: This subject focuses on the discipline areas of education with emphasis on the content of the Science and Technology K - 6 syllabus. At all times the link between science and technology will be stressed.

Students will study the implications of recent research into children's understanding of scientific concepts to the teaching of science. Topics include: living things; natural phenomena; the earth and its surroundings; built environments; information and communication; products and services.

EDUS226 Human Society and its Environment KLA Elective I 6cp

Spring Wollongong On Campus

Pre-requisites: EDUS104 or EDUS203

Subject Description: This subject is concerned with the development of a 'global quilt' of knowledge and understandings relevant to the teaching of HSIE in primary schools. Approaches will be both thematic and by continent. A range of teaching strategies for effective classroom implementation will be studied. Further work on developing lessons and units of work in HSIE will build on the basis established in EDUS203.

EDUS333 Science and Technology Education (K-6) Elective II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUS102

Subject Description: During this subject students will plan a five week sequence of science education lessons that relate to one of the content topics listed below. They will teach 5 lessons from the unit they developed at a local primary school. Topics to be studied include: working scientifically, energy, investigating small animals, chemistry in primary schools, the changing earth, weather, motion, astronomy, applications of technology in our lives.

EDUS335 HSIE KLA Elective II 6cp

Autumn Wollongong On Campus

Subject Description: This subject covers knowledge and understanding of each of the continents and includes a major study on a continent of the students choice. Close attention is paid to linking all work covered to the current syllabus.

Successful completion of this subject will mean that the student has developed a range of teaching materials and teaching and learning strategies of immediate use and practicality. Interaction and interdependence of all systems within our world is the unifying concept.

EDUS411 Science and Technology Education KLA Elective III 6cp

Autumn Wollongong On Campus

Subject Description: This subject examines in detail the investigating processes emphasised in recent primary school science and technology syllabuses. It promotes changes in teacher behaviour required to effectively develop, implement and evaluate instructional programs that employ the processes of investigation .

EDUS414 Science and Technology Education Key Learning Area Elective IV 6cp

Spring Wollongong On Campus

Subject Description: A study of educational theory supporting teaching strategies currently employed in technology and design education .This subject critically examines approaches that have been taken to design and technology in the United Kingdom. These approaches will be compared with the recommendations in the Technology - a curriculum profile for Australian Schools (1994). The proposed recommendations for levels 1 to 4 will be critiqued and implications for primary schools discussed.

EDUS441 Human Society and its Environment KLA Elective III 6cp

Autumn Wollongong On Campus

Subject Description: In the course of this subject students will use a problem solving approach to examine critically and develop possible, probable and preferred scenarios on a range of global issues. Topics may include: goals for a better world: alternative futures: ecological analysis of consumerism: population and food supply: women's issues: urbanization: informed citizenship.

EDUS444 Human Society and its Environment Key Learning Area Elective IV 6cp

Spring Wollongong On Campus

Subject Description: This subject will select themes from the syllabus document HSIE K-6 and develop alternative approaches towards scope and sequence development. Innovative and creative methods of presentation of themes for the primary classroom will be stressed. Lesson and unit development will be a part of this. In addition a theoretical base for curriculum planning in the social sciences will be studied. Above all, this is a practical subject with immediate applicability to the classroom.

EDUT104 Introduction To Teaching/Learning 6cp

Spring Loftus On Campus

Subject Description: In this subject, students will develop understandings about general principles that underpin learning and teaching as a dynamic relationship in the classroom. They will be introduced to the fundamental concepts of pedagogy (the art of teaching), and will focus on

various approaches to the areas of lesson planning and classroom management that are two of the most important issues facing beginning teachers. In addition, an understanding of the issues related to the transition of children from primary to secondary school will be covered as well as issues about child protection and student welfare. The subject will include a practicum with 5 separate days plus a one-week block.

EDUT111 Curriculum and Pedagogy I 6cp

Autumn Wollongong On Campus

Subject Description: This subject will assist students to develop an understanding of learning and teaching as an interactive process. Students will be introduced to essential curriculum concepts, classroom management strategies and pupil welfare issues. The subject will guide students in lesson planning and encourage reflective practice. Students will observe a range of demonstration lessons and apply their knowledge and skills in micro teaching. They will also complete ten days of practice teaching.

EDUT121 Curriculum and Pedagogy I Early Childhood 6cp

Autumn Wollongong On Campus

Subject Description: This subject will assist students to develop an understanding of learning and teaching as an interactive process. Students will be introduced to essential curriculum concepts, classroom management strategies and pupil welfare issues. The subject will guide students in lesson planning and encourage reflective practice. Students will observe a range of demonstration lessons and apply their knowledge and skills in micro teaching. They will also complete fifteen days of practice teaching.

EDUT204 Professional Mathematics Community I 6cp

Spring Loftus On Campus

Subject Description: This subject is designed to develop competencies needed for planning and teaching the NSW Mathematics syllabus (Stages 4/5). Students will appreciate of the nature of mathematics and how this impacts on pupils thinking and classroom learning of mathematical concepts and conventions. It will provide students with ideas and opportunities to apply practise and develop basic teaching competencies that are appropriate for year s 7-10 mathematics. These competencies reflect an understanding of the school culture, classroom environment and would involve the design and evaluation of a series of lessons. Suggestions for classroom management strategies for effective teaching will be presented. The subject will include a practicum with 5 separate days plus a two-week block.

EDUT206 Professional Science Community I 6cp

Spring Loftus On Campus

Subject Description: This subject covers teaching and assessment strategies applicable to the NSW Science syllabus (Stages 4/5). It involves a critical examination of mandatory policies that affect teachers & students across the prescribed focus areas in order to develop pedagogy that models best practice. Ideas for classroom management strategies for effective teaching will be presented. Students

will encounter a range of hands-on experiences with a variety of stimulus material to enhance their learning opportunities and assist in developing strategies for teaching science in ways that contribute to scientific literacy. The subject will include a practicum with 5 separate days plus a two week block.

EDUT211 Curriculum and Pedagogy II 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUT111

Subject Description: This subject builds on the skills and knowledge of EDUT111. Topics include: the theory and application of the role of the teacher; principles of curriculum planning; interactive learning and teaching strategies; principles of student assessment; classroom organisation and management. Students will apply these areas of understanding to planning sequences of lessons, to teaching practice, and to communicating effectively in the classroom.

EDUT301 Research Methods 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUT211

Subject Description: This subject is designed to introduce students to a range of inquiry and evaluation strategies relevant to the development of a reflective teacher. Topics will include: an overview of inquiry paradigms; assumptions underpinning different paradigms; critically reviewing research literature; developing skills in data gathering, representation, analysis and interpretation; ethical issues associated with educational inquiry; and the design, implementation and reporting of an educational inquiry.

EDUT302 Curriculum and Pedagogy III 12cp

Spring Wollongong On Campus

Pre-requisites: EDUT211

Subject Description: Approaches to curriculum design and change and an appreciation of the complexity of the teacher's role in the classroom, school and the community will be developed. A school level inquiry will evaluate an aspect of school curriculum or policy related to across-curricula equity perspectives. For the extended practicum a five week program in all KLS's will be required. As part of this experience students will be expected to display confidence and competence in interpersonal relations and complete and evaluate an effective teaching position for six weeks.

EDUT304 Professional Mathematics Community II 6cp

Spring Loftus On Campus

Subject Description: Students will develop understanding of teaching and assessment strategies applicable to the NSW Mathematics syllabus Stages 6, including requirements for the three HSC mathematics subjects. Students will encounter a range of experiences that are aimed at identifying and investigating the deep structure of mathematical understanding and problem solving. The theme learning mathematics within a classroom community will be investigated via a series of episode-based seminars. Discussion will also examine the role of teachers in establishing communities of mathematical inquiry in the classroom. It will build on the understandings and skills

developed in EDUT204, further preparing students for the Professional Practice component of the course. The subject will include a practicum with 5 separate days plus a two-week block.

EDUT306 Professional Science Community II 6cp

Spring Loftus On Campus

Subject Description: This subject covers teaching & assessment strategies applicable to the NSW Science syllabus for Stage 6. It involves a critical examination of mandatory policies that affect teachers & students across the Preliminary & HSC courses. This course assists pre-service teachers in planning & conducting investigations, communicating information & understanding, & developing scientific thinking & problem-solving techniques. It will focus on the current scope of contemporary education, curriculum development and research in the areas of Earth & Environmental Science, Physics & Senior Science. The subject will include a practicum with 5 separate days plus a two-week block.

EDUT312 Early Childhood Extended Practicum 12cp

Spring Wollongong On Campus

Pre-requisites: EDUF303

Subject Description: Students will teach in early childhood centres supervised by teacher trained early childhood educators and monitored by visiting academics. Students will be expected to take responsibility for programming, implementing and evaluating coherent sequences of learning experiences based on the children's developmental learning needs and interests.

EDUT403 Research Methods in Education 6cp

Autumn Wollongong On Campus

Pre-requisites: EDUF303

Subject Description: This subjects extends students' understandings of qualitative and quantitative inquiry paradigms in educational research. This subject is designed, particularly, to support honours students as they conduct their honours thesis. As such, topics covered will extend students' understandings of ethics, and in identifying a research question, writing a literature review, choosing an effective research method, gathering, representing, analysing and interpreting data, and report writing.

EDUT404 Professional Mathematics Community III 12cp

Spring Loftus On Campus

Subject Description: In this subject students will review a number of theoretical frameworks and evaluate their impact on 7-12 mathematics learning and teaching. It is intended that students will reflect on the influence of cognitivist and constructivist perspectives on classroom practices and design of productive learning environments. Seminars will also focus on cultural, social and organisational constraints that have traditionally impeded access to mathematics. The use of Information Technology in the examination of growth of deeper understanding of selected mathematics concepts will be explored further. It will build on the understandings and skills developed in EDUT204 and EDUT304, preparing students for Professional Practice and leading to the

development of confidence and competence in applying class management skills, and facilitating the use of post-lesson reflection and evaluation.

EDUT405 Critical Approaches To Curriculum 6cp

Autumn Loftus On Campus

Subject Description: This subject covers fundamental principles of curriculum design, implementation and evaluation, and critiques them from a variety of perspectives, within NSW, Australian and international contexts. This subject addresses issues such as the competing interests of different curriculum stakeholders, questions of rigour and the determination of subject content, unequal learning outcomes, critiques of the curriculum within academic, media and political domains and the contribution of research in learning and teaching. Part of the subject will require students to apply these critiques to their own teaching subject(s).

EDUT406 Professional Mathematics Community III 12cp

Spring Loftus On Campus

Subject Description: This subject will focus on how to become an effective member of a secondary science staff. This includes understanding the stage 4-6 syllabus documents, related school documents, how to plan a teaching program, how to devise assessment and reporting schemes, devise and organise resources as well as how to work in a team. Seminars will also focus on cultural, social and organisational constraints that have traditionally impeded access to science. The use of IT in the examination of growth of deeper understanding of selected science concepts will be explored further. It will build on the understandings and skills developed in EDUT306 and, preparing students for Professional Practice and leading to the development of confidence and competence in applying class management skills, and facilitating the use of post-lesson reflection and evaluation. The subject will include an internship consisting of a five-week block.

EDUT422 Reflective Practice 6cp

Autumn/ Spring Wollongong On Campus

Subject Description: In this subject students will study the application of action research as it relates to inquiry in professional settings. This subject develops the knowledge and skills needed to develop and implement an inquiry project in an educational setting.

EDUT432 Inquiry Project in Education 6cp

Autumn/ Spring Wollongong On Campus

Subject Description: This subject will require students to plan, conduct and report upon an inquiry focused upon educational aspects of a Key Learning Area or educational problem. Skills in library research, critical analysis of selected educational literature, and critical review of journal material relevant to the inquiry project. The project will consist of a collaborative or individually defined topic that is negotiated with the supervisor.

EDUT490 Project In Early Childhood 12cp

Annual Wollongong Flexible

Subject Description: This subject deals with the theory and practice of action research in early childhood classrooms and other institutions or young children. Students will undertake an action research project on an approved topic.

EDUT493 Thesis 24cp

Annual Wollongong On Campus

Subject Description: The student will be required to complete a thesis, approximately 20,000 words, in length, based upon a course of supervised study on a topic chosen by the student and approved by the supervisor.

EDUT495 Selected Topics in Early Childhood Education 18cp

Autumn/ Spring Wollongong On Campus

Annual Wollongong On Campus

Subject Description: The student will be required to undertake Advanced Research methods as a component of this subject. The remainder of the subject will deal with advanced theory and currently emerging issues in Early Childhood practice.

EDUT496 Honours Thesis in Early Childhood 24cp

Annual Wollongong On Campus

Subject Description: The student will be required to complete a thesis, approximately 20,000 words based upon a course of supervised study on a topic chosen by the student and approved by the supervisor.

EDUZ401 Education Honours 24cp

Annual Wollongong On Campus

Prerequisites: 24 cp of 300-level Education a credit level or better

Subject Description: Emphasis within this course is on both quantitative and qualitative approaches to research. The main emphasis in the taught components will be upon the nature of evidence, types of evidence, analysis and integration of evidence. Thesis topics will normally be selected from the areas of: Cognitive studies and learning; Curriculum studies; Language development and curriculum; Measurement and evaluation; Cross-cultural psychology; History of education; Gender studies; Literacy studies; Sociology of Education.

ENGINEERING SUBJECT DESCRIPTIONS

CIVL196 Engineering Computing I 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Assessment: Assignments: objectives i – iv. Mid-Session examination: objectives i, ii and iii. One 2 hour final examination: objective iv.

Subject Description: Operating Systems - understand the essentials of WINDOWS Operating System; Spreadsheets - solving engineering problems using EXCEL, preparing reports, customising tables and graphs. Preparing technical reports using MS Word. Introduction to computer programming using MATLAB, scalar and vector variables, assignment statements, program loops, program branches, sub-programs, input and output files, graphics.

CIVL245 Construction Materials 6cp

Spring Wollongong On Campus

Assessment: One 2 hour final examination: objectives i to iii. Laboratory work: objective iv. Assignments: objectives i to iii.

Subject Description: The subject is designed to introduce the properties and use of the more common materials in modern construction practice. Topics will include: Concrete - Properties of concrete; structure and composition; cements; mix design; durability; high performance concrete; concrete manufacture Steel - Properties of steel with particular reference to brittle fracture, fatigue, corrosion and fire damage Alternative materials - timber; masonry; polymers; aluminium; composites.

CIVL272 Surveying 6cp

Spring Wollongong On Campus

Assessment: Final examination: objectives i, iii, iv. Mid-session examination: objectives i, iii, iv. Tutorial: objectives i, iii, iv. Fieldwork: objectives i to iv.

Subject Description: Basic concepts - Australian map grid, Integrated survey grid, Australian height datum, control surveys, locating position, errors in measurement, units in surveying and significant figures. Measuring distances, reduced levels and angles. Determining position - traversing, global positioning systems and plane rectangular coordinates. Earthworks and volumes. Setting out - basic procedures, setting out curves, trenches, sewers, buildings and slope stakes for road grade. Introduction to underground surveying. Computer assisted data reduction. In addition to theoretical instruction, fieldwork assignments will be undertaken in electromagnetic distance measurement, traversing, levelling, curve ranging, staking a \ slope, and, for mining students, practical surveying in an underground environment.

CIVL311 Structural Design 1 6cp

Autumn Wollongong On Campus

Assessment: Design projects/tutorial assignments: objectives i to iv. 1 hour mid-session examination: objectives i to iv. 2 hour final examination: objectives 1 to iv.

Subject Description: Introduction to structural design, dead and live loads. Review of limit states design. Design of reinforced concrete structural elements according to AS 3600.

Strength and serviceability of reinforced concrete beams and one way slabs. Design of reinforced concrete columns for strength and stability.

Design of steel beams and girders to AS 4100. Design of tension and compression members for trusses. Introduction to local and lateral buckling. Design of bolted and welded steel connections.

CIVL314 Structural Design 2 6cp

Spring Wollongong On Campus

Pre-requisite: CIVL311 Structural Design 1

Assessment: Design, Projects/Tutorial, Assignments: objectives i to iii. 2 hour Final Examination: objectives i to iii.

Subject Description: This course will consider an introduction to wind and seismic loads, reinforced concrete structures including the serviceability and strength design of reinforced concrete two way slab and flat plates for multistorey buildings together with reinforced concrete footings and retaining structures. An introduction to the design of prestressed concrete beams for serviceability and strength for both buildings and bridges. Case studies of multistorey building frames.

CIVL322 Hydraulics and Hydrology 6cp

Spring Wollongong On Campus

Contact Hours: 56

Co-requisites: ENGG252 - Engineering Fluid Mechanics

Assessment: 2 hour Final Examination: objectives i to iii. Mid-Session Quiz: objectives i and ii. Laboratory reports and projects: objectives iii and iv.

Subject Description: Open Channel Hydraulics - uniform flow; gradually varied flow; changes in channel cross section; hydraulic structures; unsteady flow Flood Hydrology - data collection and analysis; flood frequency; rainfall intensity-frequency-duration relationships; unit hydrograph; design flood estimation; flood routing in rivers and storage reservoirs Pipeline and pumping systems - pipe networks; water distribution systems; pump characteristics; pressure surges.

CIVL352 Structures 1 6cp

Autumn Wollongong On Campus

Pre-requisite: ENGG251 - Mechanics of Solids

Assessment: 2 hour final examination: objectives i to iii. 1 hour mid-session examination: objectives i to iii. Other assignments may be taken into consideration: objectives i to iii.

Subject Description: Statically determinate and indeterminate trusses and frames. Flexibility and stiffness methods. Moment distribution. Unsymmetrical bending; shear centre. Elastic stability. Influence lines.

CIVL361 Geomechanics 1 6cp

Autumn Wollongong On Campus

Assessment: 2 hour final examination: objectives i to iv; Class tests/assignments: objectives i to v.

Subject Description: Soils and rocks - differences and similarities; cohesionless and cohesive soils; behaviour of intact and jointed rock masses; weight-volume relationships;

particle size distribution; index properties of soils; soil classification; soil compaction and compressibility; mechanical properties of rock. Some topics will be presented in a laboratory environment Pore water pressures and effective stress concept; permeability of soil and hydraulic properties of rock masses; groundwater flow; seepage theory; flow nets Shear strength of soils and rock masses, total and effective stress parameters, Mohr-Coulomb criterion; Hoek and Brown failure; sliding on planes of weakness. br Application of elastic theory for calculating stresses and displacements within soil or rock masses. Stability analysis of soil and rock slopes; stabilisation methods.

CIVL392 Engineering Computing 2 6cp

Autumn Wollongong On Campus

Contact Hours: 56

Pre-requisites: CIVL196 and MATH283

Assessment: Mid-Session examination: objectives i to iii. 2 hour final examination: objectives i to iv. Reports and assignments: objectives i to iv.

Subject Description: Numerical computation. Taylor series, roots of equations, numerical differentiation, difference tables, linear systems, numerical integration, differential equations. Use of applications software. Numeric Computation and Visualisation - MATLAB interactive, graphically based system for solving mathematical and engineering problems.

CIVL394 Construction 6cp

Spring Wollongong On Campus

Assessment: Final examination: objectives i to v. Class test: objectives i to iii. Tutorials or project reports: objectives i to v.

Subject Description: The subject is designed to provide students with detailed knowledge of construction with regard to both surface and underground structures, including construction techniques, stability and maintenance aspects. The following subject material will be covered: Plant and equipment in Civil Engineering practice; Construction processes and quality control; Tunnelling in soft ground and rock; Cofferdams and caissons; Harbour works; Dewatering and grouting methods; Performance monitoring and observational design; underpinning and restoration techniques; formwork and scaffolding. The lectures and tutorials will be complemented with practical project work and a field trip.

CIVL415 Structural Design 3 6cp

Autumn Wollongong On Campus

Pre-requisites: CIVL311 Structural Design 1 and CIVL314 Structural Design 2.

Assessment: Major design projects: objectives i to iv.

Subject Description: This subject includes the design of some large steel, concrete, timber and mixed structures. Gravity and lateral load resisting systems for steel, concrete, timber and mixed construction frames for wind and earthquake loads. Advanced design considerations in steel and concrete structures. Implications of fire and corrosion for steel structures, and creep and shrinkage effects in concrete structures. Advanced reinforced concrete design including shear walls, deep beams and pile caps. Integrated topics may include the design of transmission towers, large industrial buildings, multistorey buildings, car parks or other structures which enable integration of the concepts of structural design and construction.

CIVL444 Civil Engineering Design 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisites: CIVL361 Geomechanics 1, CIVL311 Structural Design 1, CIVL322 Hydraulics and Hydrology.

Assessment: No formal examination will be held. Submitted design work and assignments will be assessed covering all objectives. Site visits may be arranged.

Subject Description: Major Civil Engineering design, which will cover an integrated project incorporating geotechnical, hydraulic, structural and transport engineering.

CIVL454 Structures 2 6cp

Spring Wollongong On Campus

Pre-requisite: CIVL352 Structures 1

Assessment: 2 hour final examination: objectives i to iii. 1 hour mid-session examination: objectives i to iii. Laboratory reports: objective iv. Other assignments may be taken into account: objectives i to iii.

Subject Description: Ultimate load analysis of beams, plates, slabs and frames in steel and concrete. Composite beams and columns. Vibrations due to earthquake, wind, and water. Dynamics of single degree of freedom systems.

CIVL457 Structures 3 6cp

Contact Hours: Not on offer in 2004

Pre-requisite: CIVL352 - Structures 1

Assessment: 2 hour final examination: objectives i and ii. 1 hour mid-session examination: objective i. Designated tutorial exercises will be assessed: objectives i and ii.

Subject Description: Elementary structural concepts using matrix algebra. Structural assemblages. Finite element analysis for one, two and three dimensional problems. Computer applications in statics, stability and dynamics.

CIVL462 Geomechanics 2 6cp

Autumn Wollongong On Campus

Pre-requisite: CIVL361 - Geomechanics 1

Assessment: 2 hour final examination: objectives i to iv. Class tests/assignments: objectives i to iv.

Subject Description: One-dimensional theory of consolidation, primary and secondary consolidation; normally consolidated and over consolidated soils; settlement analysis Relationship between principal stresses at failure, importance of drainage conditions in soils, fully undrained conditions for saturated soils; drained and undrained shear strength of cohesive soils, behaviour of partially saturated soils Overburden and lateral stresses, active and passive pressures, Rankine's earth pressure theory, Coulomb's wedge theory, geotechnical aspects of retaining walls, drainage of backfill Bearing capacity of foundations; shallow footings and rafts, pile foundations, contact stress and subgrade reaction; use of elastic theory for stress and settlement calculation in soils and rocksbr. Unconfined seepage through earth structure, seepage control in dams, design of filters.

CIVL463 Geomechanics 3 6cp**Spring** Wollongong On Campus**Pre-requisite:** CIVL462 - Geomechanics 2**Assessment:** 2 hour final examination: objectives i to iii. Class tests/assignments: objectives i to iii.

Subject Description: Models of soil behaviour, stress paths in soil mechanics, total and effective stress paths, Stress strain behaviour of different types of soil under drained and undrained conditions; strain-softening; peak, softened and residual shear strength of cohesive soils; pore pressure co-efficients A and B and their use in practical problems. Soil behaviour under earthquake conditions, the phenomenon of liquefaction. Comparison of laboratory and field testing for geotechnical investigation; uncertainties in geomechanics, Analysis of cantilever and anchored sheet piles, analysis of strutted excavations.

CIVL487 Traffic Engineering 6cp**Contact Hours:** Not on offer in 2004**Assessment:** 2 hour final examination: objectives i to iv. Other short examinations and assignments may be taken into consideration: objectives i to iv.

Subject Description: The subject is designed to provide students with detailed knowledge of traffic and transport engineering. The subject will cover traffic engineering systems, traffic flow theory, intersection capacity, traffic control devices, accident studies, traffic survey methods, traffic management, transport network models, and use of traffic simulation programs. All these roads and traffic designs are to comply with the requirements of the current Australian Standards and codes of practice. The subject will include a number of tutorials, computer applications and field work.

CIVL489 Roads Engineering 6cp**Autumn** Wollongong On Campus**Pre-requisites:** ENGG251 Mechanics of Solids and CIVL361.**Assessment:** 2 hour final examination: objectives i to v. Other short examinations and assignments may be taken into consideration: objectives i to v.

Subject Description: The subject is designed to provide students with detailed knowledge of roads engineering: the design of roads both geometrically and structurally, construction and rehabilitation of roads. The subject will cover the following topics: route selection, road location, environmental factors, land information systems, geometric design of rural roads, pavement and subgrade materials, vehicular loading, analysis of road pavements, pavement design, road drainage, recycling pavements, cost analysis, planning and road construction and traffic engineering. All these roads designs are to comply with the requirements of the current Australian Standards and codes of practice. The subject may include a number of tutorials, computer applications and field work.

CIVL491 Engineering Computing 3 6cp**Spring** Wollongong On Campus**Pre-requisite:** CIVL392**Assessment:** Reports and assignments will be assessed: objectives i and ii. No formal examination.

Subject Description: Use of engineering applications software, including structural and geotechnical mechanics, using finite element programs for stress, stability, and dynamic analysis.

Discrete simulation. Depending on the availability of software other applications may be utilised. Problems will be selected from various areas in engineering.

CIVL495 Public Health Engineering 6cp**Spring** Wollongong On Campus**Pre-requisite:** ENGG252 - Fluid Mechanics**Assessment:** Two 1.5 hour class tests and two design and laboratory reports.

Subject Description: The subject is designed to introduce public and environmental engineering concepts to civil engineers. The public health issues relating to natural resources, ecological concepts, water supply and sanitation problems, water and wastewater characteristics, water quality standards and guidelines, engineering management of water quality processes in rivers and lakes, stormwater and mine water pollution and control, design of water supply and treatment processes, design of wastewater collection, treatment, reuse and disposal systems, industrial water treatment and reuse will be discussed. The lecture components will be complemented with tutorials, laboratory classes and field trips.

ENGG152 Engineering Mechanics 6cp**Spring** Wollongong On Campus**Assessment:** 2 hour final examination: objectives i to iv. Other short examinations: objectives i to iv. Laboratory reports: objectives i and v.

Subject Description: Two dimensional statics of particles and rigid bodies. Forces in frames. Kinematics of particles in rectilinear and plane motion. Kinetics of particles: equations of motion; work and energy; impulse and momentum.

ENGG154 Engineering Design and Innovation 6cp**Autumn** Wollongong On Campus**Contact Hours:** 5-6 hours per week**Assessment:** Progressive Assessment through quizzes: objectives i and ii. Assignments: objective i. Design reports: objective iii. Presentations: objective iii.

Subject Description: (a) Engineering Drawing: Introduction and standards information; geometrical constructions; freehand sketching; the production of a mechanical drawing; orthographic projection; selection and layout of views; sectional views of orthographic projections; auxiliary views of orthographic projections; general arrangements and assembly drawings.

(b) Computer-Aided Drafting: Introduction to computer aided drafting; use of entity draw and selected utility commands and services; dimensioning, display controls; coordinate systems; editing and inquiry commands; entity properties (layers) and use of blocks. (c) The phases of design; team building; design and manufacturing processes; design models; design economics; decision processes; creative design; case studies. The three sections of this subject will be presented as an integrated whole. This will be achieved through a number of creative design projects and case studies.

ENGG171 Scholars Research Project 1 6cp**Annual** Wollongong On Campus**Contact Hours:** No formal contact hours**Restrictions:** Students must be enrolled in the Engineering Scholars Program.**Assessment:** Research proposal, seminar presentation, progress report and final report.**Subject Description:** The subject introduces students to specific areas of research in the field of Engineering. Topics will be negotiated based on the current activities of various research units linked to the Faculty of Engineering and the interests of the student. Students will join a particular project and undertake certain tasks under the supervision of a designated staff member. Students are required to undertake literature reviews, collect and analyse data and report on their findings to the research team. Hands on experience in an engineering laboratory is a feature.**ENGG251 Mechanics of Solids 6cp****Autumn** Wollongong On Campus**Contact Hours:** 5 hours per week**Pre-requisite:** ENGG152 Engineering Mechanics**Assessment:** Tutorial and laboratory assignments: objectives i to iv. 1 hour mid-session quiz: objectives i and ii. 3 hour final examination: objectives i and ii.**Subject Description:** Stress on a section, concept of stress-strain relationship and Hooke's Law. Torsion of shafts and hollow sections. Problems in bending and stress of beams. Analysis of plane stress and plane strain, combined stresses. Introductory yield criteria for metals, and anelastic behaviour of non metals. Deflection of beams and frames. Statically indeterminate beams, and simple column buckling. Thermal stresses and energy methods. Experimental techniques. Prerequisite minimum preparation is Engineering Mechanics, Engineering Mathematics and Engineering Materials.**ENGG252 Engineering Fluid Mechanics 6cp****Autumn** Wollongong On Campus**Co-requisites:** MATH142 or MATH188.**Assessment:** Final examination: objectives i to v. Mid-session quizzes: objectives i and iv. Tutorial assessments: objectives i to iv. Laboratory work on hydrostatics, momentum of fluid, venturi meter, wave flow and pipe flows.**Subject Description:** This subject is designed to introduce elementary fluid mechanics concepts for civil, environmental, mechanical and mining engineers.

The topics include fluid properties, hydrostatics, manometry, Bernoulli's, mass, energy and momentum equations and their applications, dimensional analysis, fluid flow in pipes, pipe friction losses and fluid flow measurements. The lecture components will be complemented with tutorials and laboratory classes. This subject intends to provide a working knowledge to solve simple fluid flow problems in the various branches of engineering. Students are assumed to have knowledge of 1st year engineering mathematics.

ENGG255 Professional Option 2 6cp**Annual** Wollongong On Campus**Autumn / Spring** Wollongong On Campus**Contact Hours:** No formal contact hours**Restrictions:** Only part-time students in full-time employment allowed to enrol.**Assessment:** A work plan, a 4000 word report and a formal seminar presentation. All submitted material must be certified by a professional supervising engineer.**Subject Description:** This subject is for students currently in approved full-time employment and enrolled in a part-time study program. This subject will normally be taken in Stages 3, 4 or 5 of the BE Program. Students must seek approval to enrol in this subject from the Director of Studies. Approval will be granted to students who can demonstrate that their employment provides appropriate experience and training as part of their degree program. Approval will not be granted for work that involves essentially trivial/routine tasks or that is not directly related to the discipline of engineering relevant to the student's program.**ENGG271 Scholars Research Project 2 6cp****Annual** Wollongong On Campus**Contact Hours:** No formal contact hours**Restrictions:** Students must be enrolled in the Engineering Scholars Program.**Assessment:** Research proposal, seminar presentation, progress report and final report.**Subject Description:** The subject introduces students to specific areas of research in the field of Engineering.

Topics will be negotiated based on the current activities of various research units linked to the Faculty of Engineering and the interests of the student. Students will join a particular project and undertake certain tasks under the supervision of a designated staff member. Students are required to undertake literature reviews, collect and analyse data and report on their findings to the research team. Experience in engineering design, experimentation and data analysis will be a feature.

ENGG291 Engineering Fundamentals 6cp**Spring** Wollongong On Campus**Contact Hours:** 5 hours per week**Assessment:** Examinations (60%). Laboratory work and assignments (40%).**Subject Description:** This subject is designed to provide students from disciplines such as Electrical, Telecommunications and Computer Engineering with an introduction to some other Engineering disciplines which have an important role in the design and application of electrical and computer technologies. Three main areas are covered. Heat Transfer- Conduction, convection and radiation heat transfer as applicable to the field of electrical engineering. Engineering Mechanics- Forces, moments and equilibrium states; stress in beams, cylinders and shafts; simple deflection analysis. Materials Engineering- Overview, of engineering materials; bonding and crystal structure in electrical and electronic materials; origin of electrical and electronic properties; structure and properties of electrical and electronic materials; selection of materials for application in electrical engineering.

ENGG355 Professional Option 3 6cp**Annual** Wollongong On Campus**Contact Hours:** No formal contact hours**Restrictions:** Only part-time students in full time employment are allowed to enrol.**Assessment:** A work plan, a 4000 word report and a formal seminar presentation. All submitted material must be certified by a professional supervising engineer.**Subject Description:** This subject is for students currently in approved full-time employment and enrolled in a part-time study program. This subject will normally be taken in Stages 3, 4 or 5 of the BE Program. Students must seek approval to enrol in this subject from their Director of Studies. Approval will be granted to students who can demonstrate that their employment provides appropriate experience and training as part of their degree program. Approval will not be granted for work that involves essentially trivial/routine tasks or that is not directly related to the discipline of engineering relevant to the student's program.**ENGG361 Engineering Management 6cp****Spring** Wollongong On Campus**Assessment:** Case study report; examination, tutorial papers, and tutorial presentation.**Subject Description:** This subject identifies and examines the economic, financial and statutory basis for decisions required in the evaluation of proposed engineering projects, and in the financial management of engineering projects and operations.

It provides a brief introduction to the foundations of modern quality management and to statistical quality control methods relevant to engineering operations. It also provides an introduction to the law of contracts and to the evaluation and management of engineering contracts.

ENGG371 Scholars Research Project 3 6cp**Annual** Wollongong On Campus**Contact Hours:** No formal contact hours**Restrictions:** Students must be enrolled in the Engineering Scholars Program.**Assessment:** Research proposal, seminar presentation, progress report and final report.**Subject Description:** The subject introduces students to specific areas of research in the field of Engineering. Topics will be negotiated based on the current activities of various research units linked to the Faculty of Engineering and the interests of the student. Students will join a particular project and undertake certain tasks under the supervision of a designated staff member. Students are required to undertake literature reviews, collect and analyse data and report on their findings to the research team. The research will include experience in an engineering laboratory and/or computer work.**ENGG434 Introduction to Materials Welding and Joining 6cp****Spring** Wollongong Flexible**Exclusion:** MATE434 - Materials Welding and Joining**Assessment:** Assignments (2). Quiz (computer based via WebCT). Exam.**Subject Description:** The subject introduces the student to the selection and cost effective application of joining technology. OH&S and quality issues and recent welding innovations are covered.**ENGG452 Thesis A 12cp****Autumn** Wollongong On Campus**Annual / Spring** Wollongong On Campus**Spring 2005 / Autumn 2005** Wollongong On Campus**Pre-requisites:** Completion of 120cps**Assessment:** Reports: objectives i to iii. Seminar: objective vi. Manuscript: objectives i to vi.**Subject Description:** All students must complete a 12 credit point thesis (ENGG452) normally over a period of two sessions - though Scholars Program students may elect to take ENGG453. Students are expected to spend at least 336 hours on the 12 credit point thesis. The thesis is a core element of the degree in each engineering course. The knowledge and skills acquired in the design, experimentation, analysis, management and communications aspects of the course are brought together in an individual project undertaken by the student under the guidance of an academic supervisor. Individual disciplines will advise further requirements at the start of the thesis.**ENGG453 Thesis B 18cp****Annual** Wollongong On Campus**Autumn / Spring** Wollongong On Campus**Autumn** Wollongong On Campus**Spring 2004 / Autumn 2005** Wollongong On Campus**Pre-requisite:** Completion of 120cps**Assessment:** Reports: objectives i to iii. Seminar: objective vi. Manuscript: objectives i to vi.**Subject Description:** As an alternative to ENGG452, subject ENGG453 (18 credit points) may be taken by students in the Engineering Scholars program, or by other high achieving students with the permission of the Sub Dean of Engineering. A student electing to take ENGG453 will undertake a longer period of work and complete a longer thesis. Students are expected to spend 504 hours on the 18 credit point thesis. The thesis is a core element of the degree in each engineering course. The knowledge and skills acquired in the design, experimentation, analysis, management and communications aspects of the course are brought together in an individual project undertaken by the student under the guidance of an academic supervisor. Individual disciplines will advise further requirements at the start of the thesis.**ENGG454 Professional Experience 0cp****Autumn / Spring** Wollongong On Campus**Assessment:** Written report (guidelines available from Engineering Enquiry Centre).**Subject Description:** As a requirement for the award of the degree of Bachelor of Engineering, students are required to obtain at least 12 weeks approved professional experience in a relevant industry during the course and submit a report to the satisfaction of the Discipline Directors of Studies.

It is preferable that candidates undertake this requirement during the summer recess, between the third and fourth years of the BE degree. Exemption from the requirement will be given to a student who has passed one or more of the Professional Option subjects. Refer to Discipline Directors' of Studies for details.

ENGG455 Professional Option 4 6cp

Annual Wollongong On Campus

Autumn / Spring Wollongong On Campus

Contact Hours: No formal contact hours

Restrictions: Only part-time students in full-time employment allowed to enrol.

Assessment: A work plan, a 4000 word report and a formal seminar presentation. All submitted material must be certified by a professional supervising engineer.

Subject Description: This subject is for students currently in approved full-time employment and enrolled in a part-time study program. This subject will normally be taken in Stages 3, 4 or 5 of the BE Program. Students must seek approval to enrol in this subject from their Director of Studies. Approval will be granted to students who can demonstrate that their employment provides appropriate experience and training as part of their degree program. Approval will not be granted for work that involves essentially trivial/routine tasks or that is not directly related to the discipline of engineering relevant to the student's program.

ENGG461 Project Management and Human Factors in Engineering 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week

Assessment: Assignments and examination - covering all objectives.

Subject Description: The particular topics addressed in this course, which every engineering student should know and be prepared to put into practice on entering his/her professional career, include: Project Management; Total Quality Management; Quantitative Management Techniques; Human Relations; Engineers' Ethics and Controversy; Engineers as Consultants/Experts; Accidents and Risk, Occupational Health and Safety; Maintenance Management; and Innovation Management.

ENVE220 Water Quality Engineering 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG252 - Engineering Fluid Mechanics

Assessment: 2 hour final examination: objectives i to v. 1hour mid-session quiz: objectives ii to iv. Laboratory reports: objectives i to v.

Subject Description: The subject is designed to introduce environmental engineering concepts at a fundamental level. The environmental problems and solutions relating to natural resources, ecological systems, water pollution, water quality processes in rivers and lakes, water supply and treatment processes, wastewater collection, treatment and disposal, water quality guidelines and other global environmental issues will be discussed. The lecture components will be complemented with tutorials and laboratory classes.

ENVE221 Air and Noise Pollution 6cp

Spring Wollongong On Campus

Assessment: 2 hour Final Examination: objectives i and iv. Mid-session quizzes: objectives i and iii. Laboratory reports and projects: objectives i to iii.

Subject Description: Air Pollution - meteorology; atmospheric chemistry; air quality; sources of air pollution; effects of air pollution; dispersion modelling; control of air pollution. Noise Pollution - noise pollution legislation; sound power and intensity levels; noise from several sources; background noise effects; defining and measuring noise; weighting factors and equivalent noise levels; effect of noise on people; propagation of sound; noise control at source, during propagation and at receiver; design of noise barriers.

ENVE311 Pollution Control and Cleaner Production 6cp

Spring Wollongong On Campus

Pre-requisite: ENVE220 - Water Quality Engineering

Assessment: Project report: objective iv. Tutorial/assignments: objective iii. 2 hour mid-session examination: objectives i and ii. 2 hour final examination: objectives i and ii.

Subject Description: This subject is divided into two sections. The first section deals with unit processes design. In this section all the physico-chemical processes commonly used for water pollution control will be discussed in detail. In the second section two topics viz, industrial waste management and cleaner production will be introduced. Industrial waste management includes source identification, characterisation, segregation, treatment and disposal. It also includes design of various unit operations/processes for liquid waste treatment. Application of advanced processes in an industry for waste treatment, reuse and recycling, and final disposal of wastes, plus overall waste auditing of an industry will be illustrated using a case study.

ENVE320 Environmental Engineering Design 1 6cp

Autumn Wollongong On Campus

Pre-requisite: ENVE220 Water Quality Engineering

Assessment: 2 hour mid-session examination: objective ii. 2 hour end of session quiz: objectives iii to iv. Design reports: objective i to iv. Field trip assessment: objectives i and iv.

Subject Description: The subject is designed to introduce system design using unit processes encountered in environmental engineering. The subject will cover design concepts, detailed and advanced design of water supply and treatment systems, advanced solid-liquid separation processes, design of wastewater collection systems, design of advanced wastewater treatment plant design, ocean outfall systems, design of land based systems, network design. The subject also includes design of air pollution and control systems. The lecture components will be complemented with design classes and field trips.

ENVE321 Solid and Hazardous Waste Management 6cp

Spring Wollongong On Campus

Assessment: Project report: objectives i to iv. Tutorial/assignments: objectives ii to iv. 2 hour mid-session examination: objectives i to v. 2 hour final examination: objectives i to v.

Subject Description: This subject introduces fundamentals of solid and hazardous waste management. The content includes characterisation, collection, transportation, storage and final disposal of solid and hazardous waste. In the case of hazardous waste, additional topics of identification, classification, risk assessment, legislation and health hazards will be covered. Waste minimisation, reuse/recycle; stabilisation and volume reduction of hazardous waste are considered. Besides lectures and tutorial sessions, this subject includes field trips, laboratory classes and project work.

ENVE410 Site Remediation 6cp

Spring Wollongong On Campus

Pre-requisite: CHEM214 - Analytical and Environmental Chemistry

Assessment: 2 hour final examination: objectives i to iii. Selection of mid-session quizzes: objectives i to iii. Lab reports: objective ii. Projects: objective iii.

Subject Description: This subject introduces fundamentals of site remediation and will include topics such as site characterisation, containment, soil erosion and remediation technologies. Remediation technologies such as biodegradation, permeable barriers, composting, incineration and soil vapour extraction will be presented in detail. Containment topics will include cover systems, reactive barriers, vertical barriers and geosynthetics. Topics such as remediation of soft and compressible ground, and acid sulphate soils will also be presented.

ENVE420 Water Engineering 6cp

Autumn Wollongong On Campus

Co-requisite: CIVL322 - Hydraulics and Hydrology

Assessment: 2 hour final examination: objectives i to iii. Mid-session quiz: objectives i to iii. Projects: objective iv.

Subject Description: Coastal Engineering - wave forecasting; wave refraction; diffraction and breaking; wave forces on structures; beach erosion and beach protection. Water Resources - the hydrologic cycle; distribution of the world's water resources; surface water resources; groundwater resources; computer models of catchment water balances; storage reservoir yield analysis. River Engineering - fluvial hydraulics; morphology of natural channels; erosion and sediment transport; re-naturalising streams; remediation of polluted rivers. Urban Stormwater Management - stormwater quality and flooding problems in urban areas; flood reduction using detention basins; computer modelling of urban stormwater systems.

ENVE421 Environmental Engineering Design 2 6cp

Spring Wollongong On Campus

Pre-requisites: ENVE320, ENVE321 and CIVL322.

Assessment: Five design reports: objective i.

Subject Description: The ability to undertake a comprehensive integrated project design is the capstone of a student's engineering education. This subject will provide students with the opportunity to undertake the design of a major project.

Students will be provided with an overall concept plus specific requirements that must be met by the design. All aspects of environmental engineering will be involved, including impact assessment, legislation, and modelling. Topic areas that have not been presented in previous subjects, but are required for the successful completion of the project, will be covered during the lecture portion of the class. Lecture topics will include environmental impact assessment and legislation, and environmental modelling.

ENVE422 Membrane Science and Technology 6cp

Autumn Wollongong On Campus

Assessment: Literature review and group presentation, system design group exercise and final exam.

Subject Description: The subject intends to demonstrate to students how nature works (biological membranes) and how such principles (membrane processes) can be used for medical, water and wastewater, processing and other industries by engineering appropriate materials and systems. The subject hence leads from nature to material science and engineering, fundamental transport principles to applications and process design with immediate relevance to the water and wastewater treatment industry where membranes are becoming a predominant process choice worldwide. The subject aims to bring science and engineering together on a number of levels such as in terms of learning from nature, applying engineering solutions to medical applications and using scientific principles to obtain engineering solutions. Both engineering and science students will be exposed to the thinking in the other discipline.

MATE201 Structure and Properties of Materials 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisites: ENGG153 - Engineering Materials or PHYS141 - Fundamentals of Physics A and PHYS142 - Fundamentals of Physics B.

Assessment: Assignments: objectives i to v. CD ROM based tutorials: objectives i to iv. Tests: objectives i to v. Examinations: objectives i to v.

Subject Description: Study of fundamental crystallography, structural defects, non-crystalline structures, structures of common metals, intermetallics, simple ceramics and polymers. Electrical, magnetic, optical, thermal and mechanical properties of materials and their relationships to structure will be discussed. Basic principles of techniques used to study structure will be introduced: optical microscopy, x-ray diffraction and scanning and transmission electron microscopy. Students will participate in tutorials and laboratory work related to these topics.

MATE202 Thermodynamics and Phase Equilibria 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: CHEM103 - Introductory Chemistry for Engineers

Assessment: Assignments, laboratory reports, mid-session test, and final examination.

Subject Description: Laws of thermodynamics: energy, entropy and free energy; equilibrium in chemical systems; chemical potential; determination of thermodynamical quantities; thermodynamics of phase equilibria and construction of phase diagrams. Binary condensed systems; Gibbs phase rule: lever rule; types of equilibrium diagram; experimental determination of phase diagrams, microstructural development, non-equilibrium effects. Ternary condensed systems. Application of phase equilibria to metallic, ceramic and polymeric systems.

MATE203 Phase Transformations 6cp

Spring Wollongong On Campus

Contact Hours: 52

Co-requisite: MATE201 - Structure and Properties of Materials

Assessment: Final examination and assignments.

Subject Description: Nucleation in liquid and solid states; thermodynamics of solidification; solidification of pure materials and alloys; thermal supercooling; constitutional supercooling; interface stability; solute redistribution; eutectic solidification; crystal growth techniques. Solid-state transformations - nucleation and growth of phases; Fick's laws of diffusion; diffusion mechanisms; transformation kinetics; transformation diagrams. Diffusional and diffusionless transformations: decomposition of solid solutions; ordering reactions, spinodal decomposition; eutectoid, massive, bainitic and martensitic transformations; crystallographic features; transformations in common alloy systems.

MATE204 Mechanical Behaviour and Fracture 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE201 - Structure and Properties of Materials

Assessment: Assignments, laboratories, and final examination.

Subject Description: Theoretical strength; slip; twinning; deformation of single and poly crystals; dislocation multiplication; cross slip; climb; dislocation interactions. Strain hardening; solid solution hardening; dispersion hardening; grain size strengthening; other strengthening mechanisms.

High temperature deformation; creep; stress relaxation; effect of strain rate and temperature; plastic instability; super plasticity; viscoelastic behaviour. Fracture mechanics - fracture modes; plane stress and plane strain; notch effects; crack propagation; fracture toughness; high temperature fracture; fatigue and environmentally-assisted failure; design to minimise fracture.

MATE291 Engineering Computing and Laboratory Skills 6cp

Autumn Wollongong On Campus

Contact Hours: 65

Pre-requisite: ENGG153 - Engineering Materials

Assessment: Assignments, tests, laboratory reports, and examination.

Subject Description: Introduction to basic laboratory techniques used to study structure and properties of materials.

Techniques include thermal treatment, reflected and transmitted light microscopy, basic x-ray diffraction, mechanical testing of metals, ceramics and polymers, and statistical analysis of data. Introduction to computer operating systems, application of spreadsheets to engineering problems, introduction to structured programming using flow-charts; data acquisition and control using the C-language. Information gathering and report writing skills will be further developed.

MATE301 Engineering Alloys 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE203 - Phase Transformations

Assessment: Laboratory reports, assignments and examinations.

Subject Description: Ferrous alloys - Phase transformations in ferrous alloys; binary and ternary additions to iron; strengthening mechanisms; ternary and multi component alloys; commercial steels and cast irons; hardenability Non-ferrous alloys - Physical metallurgy, processing and applications of commercially significant non-ferrous alloys Advanced alloys and processing - superalloys, superplastic alloys and metal-matrix composites. Design and selection of metallic materials on the basis of property requirements. Case studies.

MATE302 Polymeric Materials 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: ENGG153 - Engineering Materials

Assessment: Tutorial assignments, quizzes, and final examination.

Subject Description: Review of polymerisation chemistry. Description of polymer structures from macromolecular to macroscopic; introduction to techniques for characterisation of polymer structures. Relationships between structure and properties of polymers, including mechanical, thermal, chemical, optical, electrical and rheological. Processing techniques for polymer products. Engineering design with polymers. Advanced polymers.

MATE303 Ceramics, Glasses and Refractories 6cp

Spring Wollongong On Campus

Contact Hours: 39

Pre-requisite: MATE201

Assessment: Assignments: objectives i to iv. Tests: objectives i to iv. Seminar: objective iv. Processing project: objective iii. Examination: objectives i to iv.

Subject Description: Description of complex ceramic structures, including atomic and microstructural features of glass and crystalline ceramics, study of relationships between structures and physical and mechanical properties, methods for testing ceramics, industrial processing methods for ceramics, refractories, engineering ceramics, case study in design with brittle materials. A major process design project, in which students attempt to make a finished ceramic product which meets certain specifications forms a key part of the assessment.

MATE304 Transport Phenomena in Materials Processes 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATH283 Mathematics 2E for Engineers Part 1

Assessment: Tutorials, quizzes, and final examination.

Subject Description: Fluid dynamics - Properties of and types of fluids; laminar and turbulent flow; energy balances; conservation of energy; flow through packed beds; dimensional analysis; fluid flow measurement.

Heat and mass transfer - One and two dimensional heat conduction; radiation heat transfer; free and forced convection. Application of Ficks laws to diffusion in solids, liquids and gases; mass transfer coefficient; mass transport in fluid systems; interphase mass transfer; two-resistance theory. Applications of transport phenomena to a range of metallurgical processes.

MATE305 Primary Materials Processing 6cp

Spring Wollongong On Campus

Pre-requisite: MATE202 - Thermodynamics and Phase Equilibria

Assessment: Assignments, laboratory, project, examination.

Subject Description: Introduction to primary processing; raw materials and materials preparation for production of metals, ceramics and polymers; mineral processing ; production of metal oxides, clinkers and sinters. Study of metallurgical processes including iron and steelmaking, production of copper and aluminium. Introduction to polymerisation processes. The application of thermodynamics and kinetics to processing. Students will be involved in case study based projects, some laboratory work and visits to industrial sites.

MATE306 Degradation of Engineering Materials 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE202 - Thermodynamics and Phase Equilibria

Assessment: Examination, tutorial assignments (some using interactive computer software), laboratory reports.

Subject Description: Preliminary corrosion & electrochemistry; metals in equilibrium, thermodynamics of corrosion and dissolution, Pourbaix diagrams; Departures from equilibrium-kinetics of corrosion & the Evans diagram; types of corrosion, methods of measuring corrosion rates; Surface films & passivity; Corrosion prevention & control. Wear of materials; surface topography and its determination; origin of friction, influence of surface films and work hardening on friction; introduction to contact mechanics; wear mechanisms and wear maps; techniques for minimising wear. Design of materials for particular service environments.

MATE391 Materials Testing Techniques 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE291 - Engineering Computing and Laboratory Skills

Assessment: Logbooks, laboratory reports.

Subject Description: This is a laboratory based subject designed to give students practical experience with a variety of testing techniques used to assess materials.

Techniques include thermal analysis, dilatometry, particle size analysis, and scanning electron microscopy and energy dispersive spectroscopy of x-rays. Principles of the techniques, data analysis and applications of the techniques to engineering problems such as failure analysis and phase transformations will be studied.

MATE401 Selection of Materials in Engineering Design 6cp

Autumn Wollongong On Campus

Contact Hours: 52

Pre-requisite: MATE201 - Structure and Properties of Materials

Assessment: Assignments, case study projects, examination.

Subject Description: Engineering materials: properties, specifications and standards. Processes for shaping materials. Analysis of property - processing requirements for given applications. Design for recycling and sustainable development. Cost considerations in selection and design. Influence of shape factors in component design. Selection methodologies: performance indices, weighted property indices, value analysis, failure analysis and cost-benefit analysis.

MATE402 Secondary Materials Processing 6cp

Spring Wollongong On Campus

Contact Hours: 52

Pre-requisites: MATE202 - Thermodynamics and Phase Equilibria and MATE203 - Phase Transformations.

Assessment: Assignments and final examination.

Subject Description: Heat flow in solidification; solidification of castings and ingots; mould design; continuous casting, near-net-shape casting, squeeze casting, spray forming and other casting methods; grain refinement; as-cast microstructure and homogenisation; casting defects. Mechanics of deformation processing; flow stress determination; temperature and strain-rate effects; dynamic restoration mechanisms; friction and lubrication; residual stresses; deformation-zone geometry; microstructural modelling; control of microstructure; computer-aided programming. Industrial metalworking processes: rolling, forging, extrusion, drawing, and machining; production of polymers and ceramics.

MATE411 Advanced Materials and Processing 6cp

Autumn Wollongong On Campus

Contact Hours: 39

Pre-requisites: MATE201 - Structure and Properties of Materials and MATE203 - Phase Transformations.

Assessment: Assignments and final examination.

Subject Description: Study of advanced materials selected from: glassy, quasi crystalline and nano crystalline materials, magnetic, electronic, catalytic and bio sensing materials; intelligent, functionally gradient and environmental materials. Superplasticity, superelasticity and superconductivity. Metal, polymer and ceramic based composite and principles of reinforcement. Advanced processing methods selected from: rapid solidification, powder processing, near-net-shape forming, self-sustaining high temperature synthesis, biomimetic processing, sol-gel processing, zone refining and molecular beam epitaxy. Engineering applications of advanced materials and processing methods.

MATE412 Electronic Materials 6cp**Autumn** Wollongong On Campus**Contact Hours:** 42**Pre-requisites:** MATE201 - Structure and Properties of Materials or PHYS205 - Advanced Modern Physics or PHYS230 - Intermediate Physics.**Assessment:** Assignments, laboratory reports and examinations.**Subject Description:** The nature of electronic materials; Electrons in solids, band theory, insulators, conductors, semiconductors and superconductors. The free and nearly free electron theories. Electrical conductivity, hall effect. Types of magnetic materials. Semiconductors - intrinsic, extrinsic, the hole, the p-n junction. Superconductors - phenomena, BCS theory. Production of semiconductors and superconductors, control of processing to achieve desired properties. Design and production of novel materials to achieve improved performance in electronic devices; modern applications.**MATE413 Structural Characterisation Techniques 6cp****Contact Hours:** Not on offer in 2004**Pre-requisite:** MATE291 - Engineering Computing and Laboratory Skills**Assessment:** Assignments, seminars, laboratory practice and reports.**Subject Description:** Several advanced structural characterisation techniques will be introduced through lectures and laboratory classes. Topics may be selected from: electron microscopy - interactions of electrons with solids, electron optics, image formation and interpretation, scanning and transmission electron microscopy, energy dispersive spectroscopy, convergent beam electron diffraction, image contrast theory, thin foil microanalysis. Atomic force microscopy, X-ray diffraction and texture analysis. Studies of advanced materials characterisation techniques may also be included.**MATE421 Metallurgical Process Engineering 6cp****Contact Hours:** Not on offer in 2004**Pre-requisites:** MATE202 - Thermodynamics and Phase Equilibria**Assessment:** Assignments, case study and examinations.**Subject Description:** This subject provides an introduction to the principles of metallurgical process engineering. The underpinning scientific principles of metallurgical processing are used to elucidate operating procedures of industrial processes. Application of metallurgical thermodynamics to slag - metal equilibria during metallurgical processes. Study of pyrometallurgical refining of copper and the use of stability diagrams: electrolytic refining. Introduction to other non-ferrous processes such as aluminium and zinc production.**MATE422 Iron and Steelmaking 6cp****Autumn** Wollongong On Campus**Pre-requisite:** MATE202 - Thermodynamics and Phase Equilibria**Assessment:** Assignments and examinations.**Subject Description:** The fundamentals of metallurgical thermochemistry and reaction kinetics are studied with a view to metallurgical process analysis in the iron and steelmaking industry, with an emphasis on ladle metallurgy.

Direct reduction of iron ore; single particle reduction kinetics and the analysis of shaft furnace operation leading to an analysis of the blast furnace. Analysis of industrial processes with emphasis on reactor design, smelting-reduction and ferro-alloy production. Principles of continuous casting.

MATE431 Sheet Metal Processing 6cp**Contact Hours:** Not on offer in 2004**Pre-requisite:** MATE203**Assessment:** Assignments, laboratory report, mid-session examination, final examination.**Subject Description:** Plastic forming - Flow behaviour of sheet metals under uniaxial and biaxial stress; yielding criteria; plastic anisotropy. Shaping processes - Deep drawing; press forming; wall ironing and spinning; stretch forming; superplastic forming; workability; forming limit criteria; defects in formed parts; cutting; piercing and blanking. Surface finishing - Metallic, ceramic and polymeric coating of sheet materials; formability and defects in coated sheet. Case studies of forming of industrially significant sheet metals.**MATE432 Mechanical and Thermal Processing 6cp****Spring** Wollongong On Campus**Contact Hours:** 52**Pre-requisites:** MATE301- Engineering Alloys and MATE304 - Transport Phenomena in Materials Processes.**Assessment:** Laboratory reports, assignments and final examination.**Subject Description:** Thermal treatment - Heat transfer in batch and continuous annealing; furnace design; heating efficiency; temperature control; heat treatment problems in engineering. Deformation and annealing - Polycrystalline plasticity; deformation microstructure and texture; stored energy; mechanisms of recovery and recrystallization; nucleation and growth of new grains; kinetics; effect of purity, solutes and particles; control of grain size; grain growth and secondary recrystallization; annealing textures; plastic and magnetic anisotropy; case studies.**MATE433 Surface Engineering 6cp****Contact Hours:** Not on offer in 2004**Co-requisite:** MATE306 - Degradation of Engineering Materials**Assessment:** Assignments, case studies and examinations.**Subject Description:** Classification of surface treatments, thermal, thermochemical, chemical vapour deposition, physical vapour deposition, thermal spraying, chemical and electrochemical processing; industrial engineering applications.**MATE441 Polymer Science 6cp****Contact Hours:** Not on offer in 2004**Pre-requisite:** MATE302 - Polymeric Materials**Assessment:** Examination, practicals and assignments.**Subject Description:** Detailed study of polymerisation reactions and control of molecular structure. Macromolecular conformations, shapes and entanglements. Solution properties of polymers. Rheological behaviour and viscoelasticity will be discussed using examples from industrial processes.

MATE442 Polymer Processing 6cp
Contact Hours: Not on offer in 2004
Pre-requisite: MATE302 - Polymeric Materials
Assessment: Examination, practicals and assignments.
Subject Description: Study of polymer processing and fabrication methods including compounding, moulding and joining. Design of polymeric products. The influence of polymer properties (especially melt rheology) on processing performance will be discussed in detail. Environmental sustainability of polymers processing, including recycling, will also be studied.

MATE443 Advanced Polymers 6cp
Contact Hours: Not on offer in 2004
Pre-requisite: MATE302 - Polymeric Materials
Assessment: Examination, practicals and assignments.
Subject Description: Recent developments in the polymers field will be discussed including a description of the global polymer industry and recent examples of newly developed polymers, such as structural polymers, biomedical materials and conducting polymers. Students will undertake a detailed case study of the development of a new polymer from lab to final application as part of the assessment.

MECH152 Engineering Computing Instrumentation and Workshop Practice 6cp
Autumn Wollongong On Campus
Assessment: Final examination: objectives iii and iv. Laboratory reports: objective ii. Practical tasks: objective i. Other examination, assignments may be incorporated in the final assessment: objectives iii and iv.
Subject Description: Introduction to practical methods and skills basic to mechanical fabrication; fitting and machining, welding and sheet metal work; elements of engineering instrumentation and mechanical measurement techniques applied to temperature, pressure, velocity, stress and displacement; introduction to computer operating systems; application of spreadsheets to engineering problems; introduction to structured programming using flow-charts; data acquisition and control using the C-language.

MECH201 Engineering Analysis 6cp
Spring Wollongong On Campus
Contact Hours: 5 per week
Pre-requisite: MATH283 - Mathematics II E Part 1
Assessment: Final examination: other short examinations; tutorials and assignments and projects may be incorporated in the final assessment: objectives i to iv.
Subject Description: Analysis for the conservation of mass, momentum and energy in engineering systems; control volume analysis for the conservation of mass, momentum and energy in engineering systems; numerical methods for the solution for a selection of problems in fluid mechanics, heat transfer, solids mechanics, bulk solids and control systems; linear algebra; eigenvalue analysis; optimisation curve fitting; roots of equation; experimentation to validate engineering analysis.

MECH215 Fundamentals of Machine Component Design 6cp
Spring Wollongong On Campus
Pre-requisite: ENGG154 - Engineering Design and Innovation
Co-requisite: ENGG251- Mechanics of Solids
Assessment: Final examination: objectives i, iii and iv. Other short examinations : objectives i, iii and iv. Project/Assignments: objectives i to iv.
Subject Description: Design and Build Competition requiring team work, concept designs and final solution; design and analysis of fundamental machine components, such as limits and fits, bolted and welded connections, power screws, keys, spur and helical gears, brakes, clutches, bearings and failure theories for static and cyclic load conditions.

MECH226 Machine Dynamics 6cp
Spring Wollongong On Campus
Pre-requisites: MATH188 or MATH142 and ENGG152.
Assessment: Final examination: objectives i to v. Other examinations, assignments and laboratory experiments may be incorporated in the final assessment: objectives i to v.
Subject Description: Dynamics of rigid bodies and simple mechanisms in plane motion, kinematic analysis by vector and polygon methods, velocity analysis by instantaneous centres; kinetic analysis by superposition vector and force polygon methods, matrix method, method of virtual work; energy distribution method; kinematics of cam profiles; balance of rotors; introduction to CAD mechanism design; synthesis of a mechanism.

MECH311 Mechanical Engineering Design 6cp
Autumn Wollongong On Campus
Pre-requisite: MECH215 - Fundamentals of Machine Component Design
Assessment: Final examination: objectives i to iii. Other short examinations/tutorials and assignments and design projects may be incorporated into the final assessment: objectives i to iii.
Subject Description: Fatigue design including combined stresses, fracture mechanics and material selection. Contact stresses. Application of current design codes (eg for shaft design and rating helical and spur gears). Case studies incorporating cost estimation and evaluation, and project management. Students are required to analyse and propose solutions for a typical engineering problem drawn from the local industry. The solution would normally involve a combination of innovative thinking and an integration of analysis tools provided in this and preceding subjects. A site visit is normally incorporated to clarify the link between the analytical work and the application to a real problem.

MECH321 Dynamics of Engineering Systems 6cp
Autumn Wollongong On Campus
Pre-requisite: MATH283 - Mathematics IIE for Engineers Part 1
Co-requisite: MECH226 - Machine Dynamics
Assessment: Final examination: objectives i to v. Other examinations, assignments and laboratory experiments may be incorporated into the final assessment: objectives i to v.

Subject Description: Derivation of system equations for mechanical, electrical, thermo-dynamic and fluid-dynamic systems; analysis of linear, transverse and torsional vibration of mechanical systems; system classification; linearisation of system equations; linear time-invariant differential equations using transfer function representation analysis of system response in the time and frequency domain; simulation of dynamic systems.

MECH341 Thermodynamics 6cp

Autumn Wollongong On Campus

Co-requisite: ENGG252 - Engineering Fluid Mechanics

Assessment: Final examination: objectives i to iv. Quizzes: objectives i to iv. Laboratory experimental reports: objective iv.

Subject Description: Properties of pure substances; first law of thermodynamics, closed systems, control volumes; second law of thermodynamics;

entropy; second law analysis of engineering systems; power and refrigeration cycles; mixtures; psychrometrics and basic air conditioning.

MECH343 Heat Transfer and Aerodynamics 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG252

Assessment: Final Examination: objectives i, iii, iv and iv. Mid-session quiz: objectives i and iii. Assignments: objective i to v. Laboratory Reports: objectives i to iii.

Subject Description: One and two dimensional heat conduction; forced convection; heat exchangers; radiation; boundary layer flows; flow around immersed bodies; one dimensional compressible flow with and without heat transfer; normal shock waves; compressible flow in pipes.

MECH365 Control of Machines and Processes 6cp

Spring Wollongong On Campus

Pre-requisites: MATH284 or MECH201 and MECH321.

Assessment: Final examination: objectives i to iv and vi. Other examinations, assignments and laboratory experiments may be incorporated in the final assessment: objectives i to vi.

Subject Description: Classical control system analysis and design concepts: transient response, steady-state error analysis, frequency domain analysis, root-locus controller design methods and frequency domain controller design methods; PLC programming.

MECH372 Solids Handling and Process Engineering 6cp

Spring Wollongong On Campus

Pre-requisite: MECH215 - Fundamentals of Machine Component Design

Co-requisite: ENGG252 - Engineering Fluid Mechanics

Assessment: Final examination: objectives i to iii. Other examinations and assignments may be incorporated in the final assessment: objectives i to iii.

Subject Description: An overview of bulk materials handling. Introduction to characterisation of bulk solid materials, gravity flow in hoppers and chutes, feeding and discharge devices, mechanical conveying, pneumatic conveying, dust control and dust explosions, and instrumentation and control for materials handling systems.

MECH378 Sustainable Energy Technologies 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG252 - Engineering Fluid Mechanics

Co-requisite: ECTE290 - Fundamentals of Electrical Engineering

Assessment: Final examination: objectives i to iv. Short examinations: objectives i to iv. Projects/assignments: objectives i to v.

Subject Description: This subjects covers a number of Sustainable Energy Technologies including the following: solar thermal systems; photovoltaics; wind energy; hydroelectricity generation; wave power systems; biomass; remote area power supplies; energy conservation/auditing.

MECH382 Manufacturing Engineering Principles 6cp

Autumn Wollongong On Campus

Pre-requisites: MECH215 - Fundamentals of Machine Component Design and ENGG153 - Engineering Materials.

Assessment: Final examination: objectives i to vi. Assignments: objectives i to vi. Laboratory reports: objectives iv and v.

Subject Description: This course introduces students to the basic principles of manufacturing engineering. Topics include an overall perspective on manufacturing; life-cycle and environmental factors; interactions between product design, materials and manufacturing processes; machining processes; metal cutting theory and machinability; joining and assembly processes; computers in manufacturing, NC/CIM/FMS/IMS; introduction to component handling and industrial robotics; basic metrology and geometric tolerancing; process capability and quality control; machining economics; overview of non-conventional processes and advanced manufacturing trends.

MECH417 Biomedical Engineering 6cp

Contact Hours: Not on offer in 2004

Assessment: Mid-session quiz, assignments and final examination: objectives i to vii.

Subject Description: Introduction to Biomechanics, Anatomy and physiology, musculoskeletal system, human movement: function of muscles and nerves, ergonomics, heart and circulation. Dynamics of Human movement and strain rosette, advanced biomaterials. May include a visit to a biomedical manufacturer and laboratories.

Review of Research Problems in Biomechanics. Assumed prior knowledge - Mechanics of Solids (e.g. ENGG251).

MECH418 Mechanical Behaviour of Engineering Materials 6cp

Contact Hours: Not on offer in 2004

Pre-requisite: ENGG251- Mechanics of Solids

Assessment: Final examination, mid-session quiz and tutorial assignments: objectives i and ii.

Subject Description: Review of the various forms of mechanical behaviour of materials. Development of tensorial stress, strain and elasticity. Physical basis for general materials behaviour and mathematical representation using constitutive equations for non-linear elasticity, plasticity, viscoelasticity and creep. Experimental and analytical approach to solutions of limit analysis for forming, ductile fracture and brittle fracture. Mechanisms of fatigue, friction and internal damping. Applications to engineering problems in product design, manufacturing operations, and reliability assessment.

MECH419 Finite Element Methods in Engineering 6cp

Autumn Wollongong On Campus

Pre-requisites: ENGG251- Mechanics of Solids and MECH201 - Engineering Analysis.

Assessment: Final examination, term project, mid-session quiz: objectives i and ii.

Subject Description: Review of solid mechanics fundamentals and of matrix algebra. Elementary derivation of finite element methods by variational principles, Galerkin method, and Rayleigh-Ritz technique. Finite element interpolation functions; natural and isoparametric coordinates.

Derivation of stiffness matrix for selected one-, two-, and three-dimensional elements. Derivation of strain-displacement relations and calculation of element stresses. Assembly and solution of system matrices; application of constraints and local coordinate systems. Introduction to structural dynamics and vibration problems, mesh generation, and finite element software in engineering applications.

MECH420 Engineering Stress Analysis 6cp

Contact Hours: Not on offer in 2004

Pre-requisites: ENGG251 - Mechanics of Solids and MECH201 - Engineering Analysis.

Assessment: Final examination, mid-session quiz and tutorial assignments: objectives i and ii.

Subject Description: Introduction to the theory of elasticity in rectangular and curvilinear coordinates. Solution of elementary problems in plane stress and plane strain using Airy's stress function. Thermoelasticity. Elementary theory of plates and shells. Classical and numerical techniques for solution of boundary value problems.

MECH421 Manufacturing Process Analysis 6cp

Autumn Wollongong On Campus

Pre-requisite: MECH382-Manufacturing Engineering Principles

Assessment: Final examination, assignments and laboratory reports: objectives i and ii.

Subject Description: Comparative Process Analysis for Rolling, Casting, Forging & Forming; Advanced or 'Non-Traditional' Manufacturing; Joining & Welding;

Steel Rolling Technology & Analysis; Metals vs. Plastics Processing; Component Assembly and Disassembly; Automation and Component Handling; CAPP (Computer Aided Process Planning) and Process Optimisation; Process Integration into Manufacturing Systems; and Economic and Ecological Process Considerations.

MECH422 Design and Analysis of Manufacturing Systems 6cp

Contact Hours: Not on offer in 2004

Pre-requisite: MECH382-Manufacturing Engineering Principles

Assessment: Final examination: objectives i, ii and v. Short examinations and assignments: objective i to v. Project: objectives i to v.

Subject Description: Basic concepts and ideas of systems study with particular reference to their use in a manufacturing environment. Categories of manufacturing systems. Principles of the structure and operations of manufacturing systems and their elements (including the human component) especially those systems applied in discrete manufacturing. Techniques of systems analysis including computer simulations. Frameworks for applying systems analysis techniques to the design and analysis of advanced manufacturing systems including intelligent manufacturing systems and those associated with achieving enterprise integration, agile manufacturing and virtual enterprises. Plant layout and facility planning. Case studies and project work involving the design and analysis of advanced manufacturing systems.

MECH423 Design for Manufacturing 6cp

Spring Wollongong On Campus

Pre-requisite: MECH382-Manufacturing Engineering Principles

Assessment: Final examination: objectives i and iv. Other short examinations/tutorials and assignments may be incorporated in the final assessment.

Subject Description: Introduction to concurrent engineering; application and benefits; concurrent engineering applied to product development, product design, manufacturing process design, and manufacturing systems design; application of engineering tools including CAD, CAM, CAPP and rapid prototyping; design for machining, forming, casting, welding and assembly concepts; design efficiency; industrial ergonomics. General planning concepts in manufacturing; CAD/CAM and CIM/FMS.

MECH424 Managing Manufacturing Activities 6cp

Contact Hours: Not on offer in 2004

Pre-requisite: MECH382-Manufacturing Engineering Principles

Assessment: Final examination, group and individual assignments: objectives i to iv.

Subject Description: The problem of designing and managing a manufacturing activity, scope of manufacturing activities, demand forecasting, product design, capacity planning, scheduling, quality management, maintenance management, safety management, financial management, performance measurement, project presentation and reflection.

MECH426 Storage and Flow of Bulk Solids 6cp

Contact Hours: Not on offer in 2004

Pre-requisite: MECH372 - Bulk Solids Handling Technology

Assessment: Final examination and other short examinations, tutorials and assignments may be incorporated in the final assessment.

Subject Description: Characterisation of bulk solids and principles of granular flow; measurement and application of flow properties; bin and hopper flow patterns and geometries; chute design; flow rate predictions of coarse and fine powders; feeders and dischargers; bin wall pressures; mixing and segregation; case studies.

MECH427 Mechanical Conveying of Bulk Solids 6cp

Spring Wollongong On Campus

Pre-requisite: MECH372 - Bulk Solids Handling Technology

Assessment: Final examination: objectives i and ii. Other short examinations, tutorials, major design project/s and assignments may be incorporated in the final assessment.

Subject Description: Design, application and characteristics of mechanical conveyors including belt, screw, cable rope way, cable and disk, chain, vibratory and elevating conveyors; unit handling; Standards; safety and case studies.

MECH428 Pneumatic Conveying and Dust Control 6cp

Autumn Wollongong On Campus

Pre-requisite: MECH372 - Bulk Solids Handling Technology

Co-requisite: ENGG252 - Engineering Fluid Mechanics

Assessment: Final examination: objectives i to v. Other short examinations, tutorials, major design project/s and assignments may be incorporated in the final assessment.

Subject Description: Basic components of pneumatic transport systems; Modes of conveying; Models to predict conveying parameters; Dense-phase suitability; Conveying characteristics and scale-up procedures; Dust control health and safety requirements; Dust characterisation; Design and operating parameters for dust control systems; Duct networks.

MECH429 Physical Processing of Bulk Solids 6cp

Contact Hours: Not on offer in 2004

Pre-requisite: MECH372 - Bulk Solids Handling Technology

Assessment: Final Examination: objectives i to iii. Other short examinations, tutorials, major design project/s may be incorporated in the final assessment.

Subject Description: Bulk solids description and characterisation; process flow sheets; unit operation characteristics and power requirements: solid-solid, liquid-solid and gas-solid and multiphase-solid processes; batch, continuous or intermediate processing and handling; control and instrumentation; case studies.

MECH430 Automotive Dynamics 6cp

Contact Hours: Not on offer in 2004

Pre-requisite: MECH321 - Dynamics of Engineering Systems

Co-requisite: MECH365 Control of Machines and Processes

Assessment: Final examination and projects: objectives i to vi.

Subject Description: Introduction, dynamics associated with acceleration, braking, cornering and rollovers; occupant comfort and response; dynamics of multi-mode mechanical systems; component characteristics and interactions including cabin, chassis, steering and suspensions.

MECH431 Computational Fluid Dynamics 6cp

Contact Hours: Not on offer in 2004

Pre-requisites: ENGG252 - Engineering Fluid Mechanics and MECH201 - Engineering Analysis.

Assessment: Final examination and projects: objectives i to v.

Subject Description: Introducing the finite difference and finite volume methods for computational fluid dynamics. Explicit and implicit methods for computation. Stability analyses. Validation of computational results. Analysis of engineering systems involving incompressible and compressible flow of fluid.

MECH438 Fluid Power 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG252 - Engineering Fluid Mechanics

Co-requisite: MECH365 - Control of Machines and Processes

Assessment: Final examination: objectives i to iv. Other short examinations, tutorials and assignments and projects may be incorporated in the final assessment.

Subject Description: Characteristics of fluid power components for the provision of power and/or control in machines and mechatronic systems. Synthesis of systems, integration with Programmable Logic Controller (PLC) units and remote controllers. Industrial applications of fluid power, design application, case study.

MECH439 Special Topics in Mechatronics 6cp

Autumn / Spring Wollongong On Campus

Assessment: To be advised on the subject handout at the beginning of the session.

Subject Description: There is no set syllabus for this subject. It is intended to be offered normally on a specialised mechatronics topic given by members of the Faculty, visiting academic staff or engineering consultants.

MECH440 Fluid Dynamics and Heat Transfer for Mechatronics 6cp

Annual Wollongong On Campus

Co-requisites: MATH142 or MATH188.

Assessment: Final examination, mid session quizzes, tutorial assessments and laboratory work: objectives i to vi.

Subject Description: This subject is designed to introduce elementary fluid mechanics and heat transfer concepts to mechatronic engineers. The topics include fluid properties, hydrostatics, manometry, Bernoulli's, mass and energy, fluid flow in pipes and their applications and dimensional analysis; fundamentals of heat transfer and how to analyse situations involving heat transfer.

MECH442 Sustainable Energy in Buildings 6cp

Contact Hours: Not on offer in 2004

Assessment: Final examination: objectives i to vii. Assignments: objectives i to vi. Lab report: objective vii. Other quizzes and presentations may be included in the final assessment.

Subject Description: Fundamental principles of the performance of buildings with particular regard to thermal comfort and ventilation; analysis and design of conventional air conditioning systems to appropriate Australian Design Standards; passive solar design of buildings; energy conservation in buildings; embodied energy in buildings; natural ventilation systems; and refrigeration systems.

MECH468 Computer Control of Machines and Processes 6cp

Autumn Wollongong On Campus

Pre-requisite: MECH321 - Dynamics of Engineering Systems

Co-requisite: MECH365 - Control of Machines and Processes

Assessment: Final examination: objectives i to iii. Other short examinations, assignments, laboratory experiments may be incorporated in the final assessment: objectives ii and iii.

Subject Description: State-variable modelling; design of state variable feedback systems, controllability, observability, optimal control, pole placement using state feedback, internal model design; digital control systems, z-transform, stability analysis in the z-domain; performance and robustness of closed loop computer controlled systems, implementation aspects.

MECH474 Systems Engineering and Life Cycle Management 6cp

Intake D Wollongong On Campus

Assessment: Final examination: objectives i to v. Other short examinations, assignments, laboratory experiments may be incorporated in the final assessment.

Subject Description: Phases of life cycle of products and industrial equipment, life cycle costing, economics and models, manufacturing and environmental considerations, cost estimations, analysis and design, logistic support, maintainability, availability, interface control, system integration, testing and performance evaluation, installation procedures, asset management, disposal purchase/replacement policies and decision making.

MECH479 Sustainable Transport and Engine Technologies 6cp

Autumn Wollongong On Campus

Pre-requisites: MECH341- Thermodynamics and MECH226 - Machine Dynamics.

Assessment: Final examination: objectives i to iv. Other short examinations, assignments, laboratory experiments may be incorporated in the final assessment.

Subject Description: Human powered transport; conventional and novel engine technology design, analysis and evaluation; strategies for reducing emissions; fuel supplies and alternative fuels; electric and hybrid vehicles; solar vehicles; fuel cells.

MECH481 Special Topics in Mechanical Engineering 1 6cp

Spring Wollongong Flexible

Autumn Wollongong On Campus

Assessment: To be advised on the subject handout at the beginning of the session.

Subject Description: There is no set syllabus for this subject. It is intended to be offered normally on a specialised mechanical engineering topic given by members of the Department, visiting academic staff or engineering consultants.

MECH482 Special Topics in Mechanical Engineering 2 6cp

Autumn / Spring Wollongong On Campus

Assessment: To be advised on the subject handout at the beginning of the session.

Subject Description: There is no set syllabus for this subject. It is intended to be offered normally on a specialised mechanical engineering topic given by members of the Department, visiting academic staff or engineering consultants.

MECH487 Systems Analysis for Maintenance Management 6cp

Autumn Wollongong On Campus

Pre-requisite: MATH283-Mathematics 2E for Engineers Part 1

Assessment: Final examination, individual assignment and group assignment: objectives i to vi.

Subject Description: Maintenance Requirements Analysis Methodology, Qualitative Methods of Failure Mode Identification, Reliability Theory for Systems, Reliability Data Analysis, Preventive Replacement Policies, Selection of Inspection Intervals, Grouping of Maintenance Actions, Repair/Replace Decisions, Practical considerations in Maintenance Requirements Analysis, Auditing Maintenance Requirements Analysis outcomes.

MECH488 Introduction to Condition Monitoring in Mechanical Engineering 6cp

Contact Hours: Not on offer in 2004

Pre-requisite: MECH226 - Machine Dynamics

Assessment: Final examination: objectives i to iv. Assignment and other quizzes and tutorials may be incorporated in the final assessment.

Subject Description: Introduction to Condition Based Maintenance (CBM); Tribology and Condition Based Maintenance; Condition Monitoring using Signal Diagnostics; CBM of Bearings, Pumps, Fans, Motors, Gearboxes, Hydraulic and Electrical Equipment; Failure Case Studies and Issues in Implementation; Artificial Intelligence in Condition Monitoring.

MECH489 Maintenance Management 6cp

Spring Wollongong On Campus

Pre-requisite: ENGG361 - Engineering Management

Assessment: Final examination, individual assignment and group assignment: objectives i to iii.

Subject Description: Approaches to maintenance, The Systems Approach, Life cycle considerations for systems, refining maintenance - A maintenance model, Analysing Maintenance Requirements: The Process, The Business Environment, Safety and Quality Standards, System Analysis, Failure Behaviour, Condition Monitoring, Maintenance Planning and Control, Inventory selection and control, Human factors and organisational aspects for maintenance, The information flows, documentation and computer control in maintenance.

MINE221 Underground Coal Mining 6cp**Autumn** Wollongong On Campus**Assessment:** Assignments/Seminars: objectives i to vi. Mid-session examination: objectives i to vi. 2 hour final examination: objectives i to vi.**Subject Description:** Access to underground coal seams, Coal mining methods; bord and pillar, longwall, miniwall, thick seam, multi-seam and horizon mining and highwall mining. Mechanisation; powered loaders and coal cutting technology, coal transport to include chain and belt conveyors, man and material transport, rope haulage and hoisting. Ventilation systems and field visits.**MINE311 Surface Mining and Blasting 6cp****Spring** Wollongong On Campus**Assessment:** Assignments/seminars: objectives i to iv. Mid-session examination: objectives i to iv. 2 hour final examination: objectives i to iv.**Subject Description:** Surface mining operations; alluvial mining, hydraulic mining, and dredging; strip mining of bedded deposits, surface mining of massive deposits, quarrying. Loading and transport of rocks and minerals. Drilling and blasting. Classification of explosives used in mines. Properties of explosives. Theories of detonation and blasting. Initiation of explosives. Blasting accessories. Systems of firing and blast design. Controlled blasting. Noise and vibration. storage, transport and handling of explosives. Misfires and accident prevention. Regulations.**MINE312 Mine Ventilation 6cp****Contact Hours:** Not on offer in 2004**Assessment:** Final examination: objectives i, ii, iv and v. Mid-session examination: objectives i, ii, iv and v. Tutorials: objectives i, ii, iv and v. Laboratory: objectives i, ii and vi.**Subject Description:** Mine air; pressure, temperature and humidity, sampling. General principles of ventilation; natural and artificial ventilation. Fans; axial and centrifugal. Fan characteristics and operations. Fan combinations and analysis. Booster and auxiliary fans. Ventilation surveying and planning. Network analysis. Application of computers to mine ventilation. Heat in mines, its physiological and psychological effects. Mine air conditioning and refrigeration. Elements of mine thermodynamics. Ventilation. Laboratory experiments.**MINE321 Underground Metal Mining 6cp****Contact Hours:** Not on offer in 2004**Assessment:** Assignments/seminars: objectives i to vi. Mid-session examination: objectives i to vi. 2 hour final examination: objectives i to vi.**Subject Description:** Underground Metalliferous ore deposit development, mining methods for regular and irregular deposits; open and supported stoping, sub level stoping, VCR, cuts and fill stoping, shrinkage stoping, block caving. Blasting and stope ventilation, Mechanisation to include drilling machines, LHD, track and Trackless transport. Pumps and Compressors, regulations and field visits.**MINE323 Mining Geomechanics 6cp****Contact Hours:** Not on offer in 2004**Assessment:** 2 hour final examination: objectives i to v. Assignments and short examination will be taken into consideration: objectives i to v.**Subject Description:** Mechanical properties of rock, insitu properties of rock mass, index properties of rocks, pre-mining state of stress. Stress distribution around underground openings. Excavation design in massive elastic rock, stratified rock and jointed rock. Support and reinforcement - pillar design, rock bolting systems, passive support systems, longwall powered supports and mine backfill. Surface subsidence and methods of limiting damage due to subsidence. Rock bursts and bumps. Monitoring rock mass performance. Laboratory experiments.**MINE411 Health & Safety in Mines 6cp****Autumn** Wollongong On Campus**Pre-requisites:** MINE221 - Underground Coal Mining, MINE311- Surface Mining and Blasting, MINE321- Underground Metal Mining.**Assessment:** 2 hour final examination: objectives i to iii. Assignments and short examination will be taken into consideration: objectives i to iii.**Subject Description:** Gases in mines - firedamp emission and control, layering of mine gases. Spontaneous combustion. Dust and dust suppression. Fires and explosions. Measurement and control of noise. Rescue and recovery. Government regulations - coal and metalliferous mine regulations and acts, occupational health and safety act. Legal aspects of mining lease and legal responsibilities of mining engineers. Safety and accident avoidance. Optimising production without compromising safety.**MINE412 Mining Economics 6cp****Contact Hours:** Not on offer in 2004**Assessment:** Assignments/seminars: objectives i to iii. Mid-session examination: objectives i to iii. 2 hour final examination: objectives i to iii.**Subject Description:** Valuation of mineral properties and mining prospects: global and local block reserves by traditional methods. Interaction of grade, tonnage, mining recovery and mining method. Introductory geostatistics. Project evaluation techniques: cash flow models, mineral taxation, tariffs, smelter agreements and accounting for inflation and risks. Marketing of mineral commodities.**MINE421 Minerals Beneficiation 6cp****Autumn** Wollongong On Campus**Assessment:** Final examination: objectives i to v. Class test: objective i to vi. Tutorials: objectives iii to v. Laboratory and project reports: objectives i to vi.**Subject Description:** The subject is designed to provide students with detailed knowledge of the art of processing raw minerals to yield marketable products using physical, chemical and electro-magnetic techniques. The course contents will cover: Metallic and non-metallic ore, process flow charts and unit operations, sampling systems, slurry streams and mass balancing, concentration and recovery, net smelter return, particle size analysis, liberation and comminution, crushing and grinding, screening, classification, gravity concentration, flotation, dewatering, tailings disposal and industrial re-use.

The lectures and tutorials will be complemented with laboratory tests, project work and a field trip.

MINE422 Mine Planning and Development 6cp

Spring Wollongong On Campus

Assessment: No formal examinations. Assignments and submission of a mine project report: objectives i to iv.

Subject Description: Each student will be given basic information of a mining prospect including borehole data, surface topography and projected output. The student will be required to submit a comprehensive report of the mine project together with appropriate plans.

MINE431 Mine Water 6cp

Contact Hours: Not on offer in 2004

Assessment: 2 hour final examination: objectives i to v. Other short examinations/tutorials/projects may be taken into consideration: objectives i to v.

Subject Description: Origin and hydro-geological aspects of mine water. Salinity problems. Acid mine drainage. Drainage in open pit mines. Drainage control in underground mine. Mine drainage design and calculations. Elements of tailings dam construction. Pollution case histories.

MINE433 Geostatistical Ore Reserve Estimation 6cp

Contact Hours: Not on offer in 2003

Assessment: Final examination: objectives i to iii. Class test: objectives i to iii. Assignments: objectives i to iii.

Subject Description: Review of statistical measures, outliers, and the desirable properties of an estimator. Basic concepts: regionalised variables, stationarity and intrinsic hypothesis.

Variograms and structural analysis: calculation and interpretation experimental variograms and fitting theoretical models. Use of volume variance relationships. Estimation variance: sampling programs, optimal drill hole positions. Theory and practice of kriging: estimation at grid node and over block, total, and average grade. Recoverable reserves.

MINE434 Special Topics in Mining Engineering 6cp

Spring Wollongong On Campus

Assessment: Final examination: objectives i to v. Class test: objectives i to vi. Tutorials: objectives iii to vi. Laboratory and project reports: objectives i to vi.

Subject Description: There is no set syllabus for this subject. It is intended that it normally be offered on a specialised mining engineering topic given by members of the Department or visiting academic staff or engineering consultants.

MINE438 Environmental Impact of Mineral Operations 6cp

Contact Hours: Not on offer in 2004

Assessment: 2 hour final examination: objectives i to v. Assignments and short examination will be taken into consideration: objectives i to v.

Subject Description: Environmental impact of surface and underground mining - visual impact assessment, air pollution, noise and vibration. Waste solids management, water pollution and acid drainage. Restoration of mine sites, land use, subsidence and socio-economic effects of mining. Field Visits.

PHYS131 Physics For the Environmental and Life Sciences A 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Assessment: Sessional written examination, written tests, one essay/poster paper, performance in laboratory and tutorials.

Subject Description: This course provides an awareness of the physical principles underlying locomotion, gas and fluid transport, and temperature control in living organisms. In addition, principles relating to the environmental impact of human activities are discussed. An emphasis is placed on the physical principles involved and examples drawn from the biosciences wherever possible.

PHYS132 Physics For the Environmental and Life Sciences B 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Assessment: Sessional written examination, written tests, one essay/poster paper, performance in laboratory and tutorials.

Subject Description: This course introduces the physical principles underlying the uses of light, lasers and radar measurement in remote sensing as well as the assessment of nuclear-radiological hazards. It covers topics in wave phenomena, principles of electrical measurements, atomic and molecular physics and nuclear physics with an emphasis on the physical principles involved and examples drawn from the biosciences.

PHYS141 Fundamentals of Physics A 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Co-requisites: MATH141 or MATH187.

Assessment: Performance in assignments, practical work, tests and sessional examinations.

Subject Description: Vectors; vector algebra; motion in one dimension; motion in a plane; particle dynamics; work and energy; conservation of energy; conservation of momentum; collisions; rotational kinematics; rotational dynamics; conservation of angular momentum; equilibrium of rigid bodies; simple harmonic motion; gravitation; elasticity; temperature; heat and the first law of thermodynamics; kinetic theory of gases; entropy and the second law of thermodynamics; fluid statics; fluid dynamics.

PHYS142 Fundamentals of Physics B 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Co-requisites: MATH142 or MATH188.

Assessment: Performance in assignments, practical work, tests and end of session examinations.

Subject Description: Vectors and their applications; charge and matter; electric field; Gauss's Law; electric potential; capacitance; current and resistance; emf and circuits; magnetic fields; Ampere's Law; Faraday's Law; inductance; waves; reflection and refraction; interference; diffraction; polarization; optical instruments; quantum physics; waves and particles; atomic physics; the Bohr atom.

PHYS143 Physics For Engineers 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Co-requisites: MATH142 or MATH188.

Assessment: Performance in assignments, practical work, tests and end of session examinations.

Subject Description: Vectors and their applications; an introduction to the physical laws of electricity and magnetism, leading to an explanation of the generation of electromagnetic waves and some basic ideas in communication theory. Electric charge and Coulomb's law, electric fields, potential differences, capacitance, dielectrics and relative permittivity, electric current, resistance, Ohm's "law", superconductivity, DC circuits and Kirchhoff's laws, magnetic fields and forces, electromagnetic waves and the EM spectrum, carrier waves, modulation and bandwidth. Waves; reflection and refraction; interference; diffraction; polarization; optical instruments; quantum physics; waves and particles; atomic physics; the Bohr atom.

PHYS205 Advanced Modern Physics 6cp

Autumn Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS141 and PHYS142.

Assessment: Final assessment is determined by a weighting factor based on the contact hours of each section. Based on performance in homework assignments, tests, laboratory work and sessional exams.

Subject Description: Special relativity; Lorentz transformations; quantum effects; atomic structure; wave-particle duality; black body radiation; photo-electric effect; bremsstrahlung; Compton effect; X-rays; de Broglie hypothesis, particle diffraction; quantum mechanics; wave packets; uncertainty principle; Schrodinger equation; correspondence principle; particle in a box; wave functions of the hydrogen atom; nuclear particles, decay laws;

binding energy; nuclear reactions; fission and fusion; statistical distribution functions; energy bands; impurity states; p-n junction and transistor.

PHYS206 Project in Physics 6cp

Autumn / Spring Wollongong On Campus

Annual Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: Normally performance in 100-level Physics and Mathematics subjects at the level of distinction or better.

Assessment: Based on satisfactory written progress reports during the project and a written description on completion.

Subject Description: Option 1 and Option 2 Dbl (A)/Aut/Spr.

PHYS215 Vibrations, Waves & Optics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS141 and PHYS142.

Assessment: Determined from the assessment of each section separately. Final assessment is determined by a weighting factor based on the contact hours of each section. Based on performance in exams, assignments and laboratory work.

Subject Description: Simple harmonic motion; two body oscillations; damped harmonic oscillator; power dissipation; quality factor; driven harmonic oscillator; superposition principle; Fourier analysis; Huygens' principle; reflection and refraction; wave motion; sinusoidal waves; group velocity; dispersion; Young's experiment; interference; coherence; Stokes' treatment of reflection and refraction; interference; standing waves; Fabry-Perot interferometer; Michelson interferometer; Fourier spectroscopy; Fresnel diffraction; Fraunhofer diffraction; resolving power; diffraction grating; holography; polarization of waves; double refraction; interference of polarized light.

PHYS225 Electromagnetism and Optoelectronics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS141, PHYS142, MATH201.

Assessment: Test, examinations, laboratory work and assignments.

Subject Description: Lectures cover, in detail, the fundamental experimental laws of electromagnetism, how these relate to the electrical and magnetic properties of materials and finally lead to the four Maxwell field equations. Plane wave solutions to Maxwell's equations in free space and the properties of these waves. Coulomb's and Gauss' laws, potential, capacitance, properties of dielectrics, field calculations, steady currents magnetism, Biot-Savart law, Ampere's law, magnetic properties of materials, Faraday's law, inductance, charge continuity equations, Maxwell's equations, plane waves in free space. The associated electronics laboratory consists mainly of experimental work, combined with some lectures and tutorials, covering the physics of p-n junction diodes and transistors, simple device models, AC theory, transistor amplifiers, operational amplifiers and their use in a variety of elementary circuits (amplifiers, adders, integrators, differentiators).

PHYS230 Intermediate Physics 12cp

Contact Hours: Not on offer in 2004

Pre-requisites: PHYS141 and PHYS142 or PHYS144 and PHYS145.

Co-requisites: MATH284 or MATH201 and MATH202.

Assessment: Assessment is based on performance in homework assignments, tests, lab work and sessional exams.

Subject Description: As for the subjects PHYS205, PHYS215 and PHYS225.

PHYS233 Introduction to Environmental Physics 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hours per week**Assessment:** Exam, Assignments and Fieldwork.

Subject Description: This subject is based on a sequence of modules, each of which introduces a key environmental physics theme illustrated using case studies. Students will be introduced to simple systems modelling utilising spread sheet analysis. The key areas studied are: (i) Atmospheric gases and vapours. (ii) Thermal radiation and the environment. (iii) Hydrodynamics of air, water and particulates. (iv) Hydrology of soils and porous materials.

PHYS235 Mechanics & Thermodynamics 6cp**Autumn** Wollongong On Campus**Contact Hours:** 6 hours per week**Pre-requisites:** PHYS141 and PHYS142.**Co-requisites:** MATH201 and MATH202.

Assessment: Assessments determined from each section separately. Final assessment determined by weighting factor based on contact hours of section. Assessment based on performance in homework assignments, tests, lab work and sessional exams.

Subject Description: Vector calculus; kinematics of a particle; dynamics of a particle; moving reference systems; central forces; dynamics of a system of particles; mechanics of rigid bodies; Lagrange's Equations. Thermodynamic systems; equations of state; work; the first law of thermodynamics and its consequences; the second law of thermodynamics; entropy; combined first and second laws; thermodynamics potentials; applications of thermodynamics; kinetic theory of the ideal gas; molecular velocity distribution.

PHYS255 Radiation Physics 6cp**Spring** Wollongong On Campus**Contact Hours:** 6 hours per week**Pre-requisites:** PHYS131 and 132 or PHYS141 and 142.

Assessment: Assessment: sessional written examination, performance in laboratory, assignments and sessional report on ANSTO visit.

Subject Description: Different types of radiation; Interaction between radiation and matter; Nuclear reactor and particle accelerator based applications in biology, medicine and physics; Nuclear reactions and the production of radioisotopes; Nuclear instrumentation; Application of radio-isotopes in biology, chemistry, medicine and physics; Use of neutrons in biology, chemistry, physics and in industry.

PHYS262 Vibrations and Waves 3cp**Spring** Wollongong On Campus**Contact Hours:** 6 hours per week**Pre-requisites:** PHYS141 and PHYS142.

Exclusions: Cannot count with PHYS215 Vibration/waves and Optics.

Assessment: Final examination, practical work and tutorial problems.

Subject Description: A. background to vibrations including: Simple harmonic motion; two body oscillations; damped harmonic oscillator: power dissipation; quality factor; driven harmonic oscillator; superposition principle; Fourier analysis.

B. background to wave motion and their interactions including topics on: wave motion; sinusoidal waves; Huygens' principle; reflection and refraction; group velocity; dispersion.

PHYS263 Photonics and Communications 6cp**Autumn** Wollongong On Campus**Contact Hours:** 6 hours per week**Pre-requisites:** PHYS141 and PHYS142.**Exclusion:** PHYS215 - Vibrations, Waves and Optics.

Assessment: Final examination; Practical work; and Tutorial problems.

Subject Description: The subject will consist of the following modules: 1. Electromagnetic waves: Waves and photons 2. Geometric optics 3. Interference: Amplitude and Wavefront Division 4. Fraunhofer and Fresnel Diffraction: Fourier Optics 5. Diffraction Gratings and Interferometers: Spectrometers 6. Coherence 7. Lasers 8. Fibre Optics 9. Detectors

PHYS295 Astronomy - Concepts of the Universe 6cp**Spring** Wollongong On Campus**Contact Hours:** 4 hours per week**Pre-requisite:** 24 credit points at 100-level.

Assessment: Performance in tests, written assignments and one 2 hr examination.

Subject Description: This subject takes a non-mathematical approach to Astronomy. No prior knowledge of physics is required to do the subject. This course will illustrate the techniques used by astronomers and will attempt to give an understanding of the universe as we presently understand it. The use of telescopes will give the opportunity to observe the phenomena discussed.

The development of astronomy; the planets; the formation of the solar system; the sun as a star; the message of starlight; the visible stars; the birth and death of stars; telescopes, big and small; the milky way; the universe of galaxies.

PHYS305 Quantum Mechanics 6cp**Autumn** Wollongong On Campus**Contact Hours:** 6 hours per week**Pre-requisites:** PHYS205 or PHYS230.

Assessment: Laboratory work 35%, homework assignments 15% and end of session examination 50%.

Subject Description: The course is an introduction to the wave mechanical theory of quantum mechanics and some applications to simple systems. Probability, the Wave Function, Schrodinger's equation in one dimension, normalisation, expectation values, operators. The time-independent Schrodinger equation, application to various potential functions, tunneling. QM in three dimensions, degeneracy, the hydrogen atom. Time independent perturbation theory, angular momentum and spin, identical particles; atoms, solids and quantum statistics.

PHYS306 Project in Physics 6cp**Autumn / Spring** Wollongong On Campus**Contact Hours:** 6 hours per week**Pre-requisites:** Normally performance in 200-level Physics and Mathematics subjects at the level of distinction or better.**Assessment:** Assessment is based on satisfactory written progress reports during the project and a written description on completion.**Subject Description:** Option 1 and Option 2 Dbl (A)/Aut/Spr.**PHYS325 Electromagnetism 6cp****Autumn** Wollongong On Campus**Contact Hours:** 64**Pre-requisites:** PHYS225 or PHYS230.**Assessment:** Laboratory work (35%), end-of-session examination (30%), homework assignments (20%) and an essay (15%).**Subject Description:** Starting with the Maxwell field equations, the course examines the properties of electromagnetic waves in free space, non-conducting and conducting materials, waveguides and plasmas. Reflection and refraction, particularly total internal reflection, are covered in detail. The generation of electromagnetic waves by accelerating charge is treated via the Lienard - Wiechert potentials and Feynman's equation. Revision of charge continuity, Maxwell's equations, boundary conditions. EM waves in free space and materials. Reflection and refraction, Snell's law and the Fresnel equations, total internal reflection and evanescent waves. Waveguides, TE and TM modes, cut off frequency. Generation of EM waves, Lienard-Wiechert potentials, Feynman equation and its application to simple systems: far-field dipole and synchrotron radiation fields.**PHYS335 Classic Mechanics 6cp****Autumn** Wollongong On Campus**Contact Hours:** 6 hours per week**Pre-requisite:** PHYS235**Assessment:** End of session examination and tutorial assignments 66% and practical, 34%.**Subject Description:** Subject covers: vectors and matrices; the special theory of relativity; motion in a non-inertial frame; dynamics of rigid bodies; Euler's Angles; Euler's Equations and applications; small oscillations; normal modes; Lagrange's equations of motion; Hamiltonian dynamics.**PHYS356 Physics of Detectors and Imaging 6cp****Autumn** Wollongong On Campus**Contact Hours:** Not on offer in 2004**Exclusion:** PHYS452 - Medical Imaging**Assessment:** Image analysis labs 20%; Review paper 30%; End of Session Exam 30%; Project 20%.**Subject Description:** This course leads to an understanding of the instrumentation and techniques involved in imaging and their role in medical physics specifically and in physics. The photographic process, Solid state detectors and CCD's, Characterisation of detectors; signal to noise sensitivity, Calibration of 2-D detectors eg. response curves, flat fields and reduction techniques;

The hardware and software of image digitisation; film digitisers, plate scanners and A/D converters, Image processing techniques: spatial filters, histogram enhancement, fourier and other transforms,

Examples of imaging technologies e.g. Side looking radar, Confocal microscopy, Radiography and CT scanning, Ultrasonics, Sonar, NMR.

PHYS363 Advanced Photonics 6cp**Contact Hours:** Not on offer in 2004**Pre-requisites:** PHYS263 - Photonics and Communication and 1 subject of 200-level Mathematics or PHYS215.**Assessment:** Written examinations, assignments and a practical seminar.**Subject Description:** Optical Design and Fabrication, Light Sources and Lasers, Photonic Materials, Quantum optics and Nanostructures, Opto-mechanical and Electro-optical Devices, materials Diagnostics, Advanced Metrology.**PHYS365 Detection of Radiation: Neutrons, Electrons and X Rays 6cp****Autumn** Wollongong On Campus**Contact Hours:** Not on offer in 2003.**Pre-requisites:** PHYS205 or PHYS230 or PHYS255.**Assessment:** 3 Assignments, Labs and Final Exam.**Subject Description:** Cylindrical and parallel plate ionisation chambers and their optimised design.

Absolute dose calibration protocols and the relative dose concept. Semiconductor detectors and their response to radiation. Thermoluminescent dosimeters - their properties, types and advantages. Film dosimetry - the principles of radiation film exposure and non-linearity of film response, EPR dosimetry and chemical dosimetry.

PHYS366 Physics of Radiotherapy 6cp**Autumn** Wollongong On Campus**Contact Hours:** 6 hours per week**Assessment:** Written examination, Assignments, Practical.**Subject Description:** This subject is intended to lead to an understanding of the techniques involved in diagnostic and therapeutic uses of radioactive isotopes in medicine. Topics covered will include: A review of homeostasis and cellular functions, epidemiology of disease; abnormal cell growth; benign and malignant tumours; cell kill; introduction to particle accelerators; medical linear accelerators; the interaction properties of X-rays and electrons; clinical radiotherapy, linear accelerator x-ray and electron beam properties; the radiotherapy computer planning process, x-ray modelling methods and brachytherapy and radiosurgery.**PHYS375 Nuclear Physics 6cp****Spring** Wollongong On Campus**Contact Hours:** 6 hours per week**Pre-requisite:** PHYS205**Co-requisites:** PHYS305 and PHYS385.**Assessment:** Assessment will be based on a group case study, spreadsheet exercises, tutorial problems and a final examination.

Subject Description: Topics presented will be selected from: 1. Nuclear characteristics: radius, charge, mass, composition, energy levels, angular momentum. 2. Nuclear models: liquid drop, semi-empirical and shell models 3. nuclear interactions and the compound nucleus. 4. Radioactive decay including alpha, beta and gamma emission. 5. Fission and chain reactions. 6. Fission reactors and radioactive waste. 7. Nuclear fusion and stellar nuclear processes. 8. Particle accelerators. 9. Elementary particles: protons to quarks.

PHYS385 Statistical Mechanics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS205 or PHYS230.

Assessment: Assessment: Laboratory work; Homework assignments; End of session examination.

Subject Description: Review of thermodynamics, quantum statistical mechanics; sharply peaked distributions, ensembles; entropy and temperature; the chemical potential; Gibbs and Boltzmann factors - partition functions; fluctuations; pressure and thermodynamic identity; Boltzmann definition of entropy; identical particles - fermion and boson distribution functions; applications to electrons in metals; blackbody radiation and Debye theory of vibrations in solids; classical limit of the quantum distribution functions; monatomic ideal gas; Maxwell-Boltzmann velocity distribution; kinetic theory; transport processes.

PHYS390 Astrophysics 6cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: PHYS205

Assessment: Assignments, sessional examination and poster paper.

Subject Description: Two strands will be presented on alternate years 1. Observational Astrophysics- Modern observational astrophysics involves observing across a wide range of wavebands from the X-ray and Gamma Rays through visible light and into the infrared and radio. To do this requires a broad understanding of optics, detector physics, astronomical database and analysis software. 2. Theoretical Astrophysics- Key topics will be selected from: Cloud collapse, Star formation and radiative transfer, Main sequence stellar models, Stellar evolution, Galaxy evolution, Cosmology.

PHYS396 Electronic Materials 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisite: PHYS205

Co-requisite: PHYS305

Assessment: Assignments, laboratory reports, exam.

Subject Description: The nature of electronic materials. Electrons in solids, band theory: insulators, conductors, semiconductors and superconductors. The free and nearly free electron theories. Electrical conductivity, Hall effect. Types of magnetic materials. Semiconductors - intrinsic, extrinsic, the hole, the p-n junction. Superconductors - phenomena, BCS theory. Production of semiconductors and superconductors, control of processing to achieve desired properties.

Design and production of novel materials to achieve improved performance in electronic devices; modern applications.

PHYS401 Theoretical Mechanics & Electromagnetism 8cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: The main programs in physics at 400-level are directed toward the Honours BSc qualification and BMedPhys. Full time Honours BSc students will normally enrol in PHYS405. Honours BMedPhys students will enrol in the Bachelor of Medical Physics program.

Assessment: Two sessional examinations and assignments.

Subject Description: Theoretical mechanics: holonomic constraints, d'Alembert's principle and Lagrange's equations; generalised potentials; variational approach and Hamilton's principle; symmetry and conservation laws; central force problem; Hamiltonian formulation of mechanics; principle of least action; canonical transformations; Poisson brackets; canonical invariants; Liouville's theorem; Hamilton-Jacobi theory; action-angle variables; classical field theory; Noether's theorem. Electromagnetism: Poisson and Laplace's equations; Green's theorem; uniqueness of solution in electrostatics; Green's functions; method of images; separation of variables and orthogonal expansions for boundary value problems; multipoles; dielectrics; magnetostatics; time-dependent fields; gauge transformations; time-dependent Green's function; Poynting vector; Maxwell stress tensor; plane electromagnetic waves in media and at dielectric interfaces; frequency dependence of dielectric response; Kramer-Kronig relations; waveguides; radiating systems and diffraction.

PHYS405 Honours in Physics 48cp

Annual Wollongong On Campus

Contact Hours: 10 hours per week

Pre-requisites: Completion of a 144 cp BSc degree which includes PHYS305, PHYS325, PHYS335, PHYS375, PHYS385, PHYS390 and PHYS396 (or equivalent). These subjects are to be passed at the level of credit or better.

Assessment: The candidate is to complete successfully the following two components: (i) An Honours Project (50% of the assessment) and (ii) A program of coursework (50% of the assessment).

Subject Description: Includes: Honours Project, Coursework Program, Electromagnetism, Quantum Mechanics, Astrophysics, Nuclear Physics, Solid State Physics.

PHYS441 Advanced Astro Physics 4cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: The main programs in physics at 400-level are directed toward the Honours BSc qualification and BMedPhys. Full time Honours BSc students will normally enrol in PHYS405. Honours BMedPhys students will enrol in the Bachelor of Medical Physics program.

Assessment: Two sessional examinations and assignments.

Subject Description: This subject consists of the lecture content of Astrophysics and Nuclear Physics sections of PHYS405.

PHYS444 Quantum Mechanics 8cp**Annual** Wollongong On Campus**Contact Hours:** 4 hours per week

Pre-requisites: The main programs in physics at 400-level are directed toward the Honours BSc qualification and BMedPhys. Full time Honours BSc students will normally enrol in PHYS405. Honours BMedPhys students will enrol in the Bachelor of Medical Physics program.

Assessment: Two sessional examinations (45% each) and homework assignments (10%).

Subject Description: This subject consists of the lecture content of Quantum Mechanics section of PHYS405.

PHYS446 Solid State Physics 8cp**Annual** Wollongong On Campus**Contact Hours:** 4 hours per week

Pre-requisites: The main programs in physics at 400-level are directed toward the Honours BSc qualification and BMedPhys. Full time Honours BSc students will normally enrol in PHYS405. Honours BMedPhys students will enrol in the Bachelor of Medical Physics program.

Assessment: Two sessional examinations.

Subject Description: This subject consists of the lecture content of the Solid State Physics section of PHYS405.

PHYS451 Nuclear Medicine 8cp**Annual** Wollongong On Campus**Contact Hours:** 4 hours per week

Pre-requisites: 24 cp of third year subjects from the BMedical Physics program including PHYS375 and PHYS255.

Assessment: Labs, Assignments, Final Exam.

Subject Description: Evolution and basic physics of radionuclide imaging. Tracer principle in Nuclear Medicine. Radioactive agents or diagnostic studies. Therapeutic radioactive agents. Physiology of body organs. Diagnosis of body organ damage - single photon emitters, positron emitters. Technetium generating, instrumentation. Quantification of the radionuclide image. Role of the computer, quality control of Nuclear Medicine studies. Therapeutic Nuclear Medicine, dosimetry principles, waste disposal. I-131, Radiation safety for patients and personnel. Paediatric considerations.

PHYS452 Medical Imaging 8cp**Annual** Wollongong On Campus**Contact Hours:** 4 hours per week

Pre-requisites: 24 cp of third year subjects from the BMedical Physics program including PHYS375.

Assessment: Assignments, test and final written examination 60%; Practical and / or project 40% .

Subject Description: Sources of diagnostic X - rays, computer tomography, instrumental set up, image definition, back projection, signal to noise, CT numbers, contrast, CT and radiotherapy. Nuclear magnetic resonances, Larmor frequency, basic imaging, slice selection, phase and frequency encoding, spin echoes, TE and TR relaxation times, mechanisms of contrast in MRI, multiecho imaging, multi slice imaging, fast imaging, flow imaging.

MR angiography, 3D data acquisition, chemical shift imaging, contrast agents, image artifacts and distortion, localised spectroscopy, set up of a clinical MR scanner, safety aspects.

PHYS453 Radiobiology and Radiation Protection 8cp**Spring** Wollongong On Campus**Contact Hours:** 4 hours per week

Pre-requisites: 24 cp of third year subjects from the BMedical Physics program including PHYS375.

Assessment: Assignments, test and written examination 60%; Practical and / or project 40%.

Subject Description: Interaction of radiation with matter, molecular effects of radiation, cell kill, repair of injury, assays of cell survival, the effect of oxygen, effect of chemical and biological modifiers, cell kinetics, tumour cell kill, early and late responding normal tissues, radio biological models, four Rs of radiobiology, time as an important factor, clinical impact in radiotherapy, protons, neutrons and pions. The natural background of radiation, man made sources of radiation, genetic and somatic risks, risks of low dose exposure, quality factor, critical organs , concepts of radiation protection.

ALARA limit values, open and closed sources of radiation, incorporation and bio kinetics of radionuclides, external sources of radiation, pregnancy and radiation, the role of the ICRP, legal aspects.

PHYS456 Imaging Physics 8cp**Annual** Wollongong On Campus**Contact Hours:** 4 hours per week

Pre-requisites: 24 cp in 300-level Physics subjects.

Assessment: Image analysis lab 40%, Review paper 30%, End of Session Exam 30%.

Subject Description: This course leads to an understanding of the instrumentation and techniques involved in imaging and its role in medical physics specifically and in physics generally. The photographic process, solid state detectors and CCD's. Characterisation of detectors; signal to noise, sensitivity, calibration, flat fields and reduction techniques. The hardware and software of image processing; film digitisers and plate scanners. An overview of Medical Imaging Techniques; Radiography, Ultrasonics, NMR.

PHYS457 Research Project 24cp**Autumn / Spring** Wollongong On Campus**Annual** Wollongong On Campus**Contact Hours:** 8 hours per week

Pre-requisites: 24 cp of third year subjects from the BMedical Physics or BSc (Physics).

Co-requisites: 24 cp of fourth year subjects from the BMedical Physics or BSc (Honours).

Assessment: A formal report on the research project is to be delivered as a colloquium and a written report/thesis to be submitted in tenth week of spring session.

Subject Description: The student will be required to participate in a research program on some topic of physics under the supervision of one of the staff member.

The student will have a choice of the following fields: Nuclear Medicine, Medical Imaging, Radiobiology, Radiation Protection, Diagnostic Radiology, Pathology and Imaging Physics, Astronomy, Solid State Physics. All the above research topics may not be available very year.

HEALTH & BEHAVIOURAL SCIENCE SUBJECT DESCRIPTIONS

BIOMEDICAL SCIENCE

BEXS351 Exercise Prescription 1: Strength and Conditioning 8cp

Spring Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: BMS203 and BMS242

Assessment: Clinical Examination 40%, Teaching Assessment 20%, Theory Examination 40%

Subject Description: This subject applies knowledge from areas of functional anatomy, exercise physiology, biomechanics and exercise science practice to the design of safe, beneficial and functional resistance programs to healthy populations in the community and the work place.

BEXS352 Exercise Prescription 2 - Aerobic Fitness 8cp

Autumn Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: BMS242

Assessment: ECG Exam 10%; Assignment 40%; Oral Examination 50%

Subject Description: This subject addresses the range of skills and strategies appropriate for the design and implementation of exercise regimes in normal populations and selected pathological populations. It involves the design of programs to improve aerobic fitness and includes information related to exercise sequencing, and developing appropriate intensity of exercise on the basis of field and laboratory based test results. Strategies for prescribing exercise within specific populations will also be included within this subject material.

BEXS401 Ergonomics 8cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: BMS203 and BMS242

Assessment: Major Assignment 20%; Presentation 20%; Minor Assignment 10%; Exam 40%; Workshop 10%

Subject Description: This subject introduces students to the area of human factors in the design and safety of the work environment. Topics will include:- the scientific basis of ergonomics; human information processing; task design; equipment design; workplace design; environmental design and macroergonomics. The subject will be designed to complement the student's pre-existing knowledge in the areas of functional anatomy, biomechanics and exercise physiology.

BEXS402 Exercise For Special Populations 8cp

Spring Wollongong On Campus

Contact Hours: 3 hours of Lectures, 5 hours of Seminars / Practicals per week

Pre-requisites: BEXS451 and BEXS452

Exclusions: For Bachelor of Exercise Science & Rehabilitation students and authorized Postgraduates

Assessment: Assignments & Reports 50%; Examination 50%

Subject Description: This subject assumes knowledge and skills covered in Advanced Exercise Physiology, Exercise Prescription I & II and extends information presented in Exercise Rehabilitation 1 & 2. The impact of selected pathologies on human performance and the effect of acute and chronic exercise on the pathology and on health of the individual require investigation and awareness by Exercise Scientists. Exercise test protocols and program delivery techniques specific to the needs of special populations in the community will be addressed. Techniques for planning and implementing interventions designed to address specific functional fitness problems in special populations will be explained. The relative merits of particular tests of physiological function in these populations will also be discussed.

BEXS411 Practicum in Exercise Science A 8cp

Annual Wollongong On Campus

Contact Hours: 1 hour of Lectures, 2 hours of Seminars per week.

Pre-requisites: BEXS351 and BEXS352

Restrictions: For Exercise Science and Rehabilitation students plus authorised postgraduates

Assessment: Performance on placement 60%; Assessment 40%. Grade of Satisfactory/Unsatisfactory given.

Subject Description: This subject assumes knowledge and skills covered in the first three years of the Exercise Science degree and provides information related to the various environments in which Exercise Scientists operate.

BEXS412 Practicum in Exercise Science B 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours of Lectures, 3 hours of Seminars per week for nominated weeks and 150 hours placement

Pre-requisites: BEXS411

Co-requisites: BEXS402

Restrictions: For Exercise Science & Rehabilitation students plus authorized postgraduates

Assessment: Grade of Satisfactory or Unsatisfactory given

Subject Description: This subject assumes knowledge and skills covered in all areas of the Exercise Science degree. It consists of an extensive clinical placement which provides the student with the opportunity to utilise the skills and competencies developed over seven semesters at the University. Techniques for planning and implementing appropriate activity programs will be applied to a larger population of clients with increased heterogeneity of functional fitness and a range of pathologies. Exercise programs specific to the needs of a range of clients will thus be designed and managed by the student. Practical skills related to exercise testing, prescription and management of the entire process will be rehearsed and behaviours consistent with those often emerging professional will be demonstrated by students enrolled in this subject.

BEXS451 Exercise Rehabilitation 1: Musculoskeletal 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 3 hours Practical per week**Pre-requisites:** BEXS351 and BMS203**Restrictions:** For Exercise Science & Rehabilitation students plus authorized postgraduates**Assessment:** Interview Examination 25%; Clinical Examination 30%; Professional Report 25%; Assignment 20%**Subject Description:** This subject extends the study of exercise rehabilitation providing revision related to the structure and function of major joints and introduces common pathologies, mechanisms and outcomes. The subject covers information related to evaluation of the injured site and the design and management of appropriate exercise rehabilitative techniques designed to improve functional capabilities and prevent reinjury.**BEXS452 Exercise Rehabilitation 2: Cardiorespiratory and Neurological 8cp****Autumn** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 3 hours of Seminars per week.**Pre-requisites:** BEXS352 and BMS346 and BMS344**Restrictions:** For Exercise Science and Rehabilitation students plus authorised postgraduate students.**Assessment:** Theory Examinations (2) 50%; Assignments (4) 50%**Subject Description:** This subject investigates the use of exercise as a clinical rehabilitative tool for patients with cardiovascular or neurological pathologies. The subject covers information related to evaluation of the pathology site and the design and management of appropriate exercise rehabilitative techniques to improve functional capabilities and enhance quality of life.**BMS 101 Systemic Anatomy 6cp****Autumn** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 3 hours Practical per week.**Exclusions:** EDUP131**Assessment:** Practical Exam 45%; Theory Exam 50%; Spot Test 5%**Subject Description:** This subject provides an introduction to the area of human gross anatomy through the study of each of the major systems of the body. In weekly practical sessions, students are exposed to anatomical structure through examination of both cadaveric specimens, radiographic images, histological slides, audiovisual materials and anatomical models. Major topics include the skeletal, muscular, nervous, cardiovascular, respiratory, digestive and urogenital systems.**BMS 103 Human Growth Nutrition and Exercise 6cp****Autumn** Wollongong On Campus**Contact Hours:** 2 hrs of Lectures, 1 hr Tutorial per week**Assessment:** Final examination 60%; Practical/Tutorial Assignment and Presentation 40%**Subject Description:** This subject will consider the relationship between growth (physical and maturational), nutritional health and exercise on various lifestyle performance indicators, such as motor skills and disease. The characteristics and determinants of growth, nutrition, health and exercise throughout the lifespan will be reviewed and will be examined from morphological, physiological and neural perspectives.**BMS 112 Human Physiology 1: Principles and Systems 6cp****Spring** Wollongong On Campus**Contact Hours:** 3 hrs of Lectures, 3 hrs Practical / Tutorials per week**Exclusions:** EDUP132**Assessment:** Final Exam 50%; Practicals 26%; Mid session test 24%**Subject Description:** Following an introduction to the cellular, physiochemical and homeostatic principles essential to an understanding of physiology, specific systems will be investigated in detail. Specific topics will include: nervous, muscular, cardiovascular, respiratory systems and reproductive digestive processes and energy balance. The practicals will exemplify lecture material; tutorials will concentrate on concepts introduced in practicals and graphic analysis, data handling and simple analyses.**BMS 200 Histology 6cp****Autumn** Wollongong On Campus**Contact Hours:** 5 hours per week (or equivalent)**Pre-requisites:** BMS101 or BMS112**Restrictions:** A quota may apply in any one year**Exclusions:** BMS102**Assessment:** Theory (Final Exam) 50%; Practical (Tests, Exam, Prac. mark, Assignments) 50%**Subject Description:** This subject provides an introduction to the structure and function of mammalian cells, tissues and organs. The practicals and lectures will emphasise functional histology. Students will examine cell ultrastructure, gain an appreciation of histological methods and acquire a detailed understanding of the major tissue types and how these tissues are integrated to produce the functional characteristics of all the major organs/systems of the body. These include the cardiovascular, lymphatic, immune, integumentary, respiratory, digestive, urinary, endocrine and reproductive systems.**BMS 202 Human Physiology II: Control Mechanisms 6cp****Autumn** Wollongong On Campus**Contact Hours:** 3 hrs of Lectures, 3 hrs Practical / Tutorials per week**Pre-requisites:** BMS112 OR EDUP132**Assessment:** Laboratory reports 15%; Mid-session exam (Multiple choice) 20%; Laboratory attendance 5%; Final Examination (multiple choice and short answer) 60%**Subject Description:** This subject is an extension of Human Physiology I (BMS112 or EDUP132) and covers material essential to the understanding of physiological control. While topics may vary from year to year, these will typically include the fundamentals of neurophysiological and endocrine control, with detailed treatment of cardiovascular, respiratory,

metabolic and digestive system control. Control abnormalities accompanying certain pathological states are also emphasised.

BMS 203 Musculoskeletal Functional Anatomy 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours of Lectures, 3 hours Practical, 1 hour Tutorial fortnightly

Pre-requisites: BMS101 and BMS211

Exclusions: EDUP233

Assessment: Spot Tests 10%; Practical Exam 1 12%; Practical Exam 2 18%; Theory Exam 60%

Subject Description: This subject investigates the musculoskeletal system from a functional anatomical viewpoint. Topics include the anatomy and function of synovial joints and the role of skeletal muscle in the performance of movements such as walking, running and prehension. Emphasis will be placed upon integrating together the anatomical structures of the musculoskeletal system to better understand the principles of human motion. Students will be introduced to basic recording techniques for the assessment of musculoskeletal function including flexibility, strength and postural tests, movement analysis, anthropometry, gait analysis and electromyography.

BMS 204 Introduction to Pathophysiology 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours of Lectures, 2 hours Practical per week

Pre-requisites: BMS202

Assessment: Practical Assessment 30%; Seminar 10%; Final Exam 60%

Subject Description: This subject introduces the student to the study of the physiological basis of human disease states.

There are four parts to this course including: pathophysiology at the cellular level; nutrition anaemias and lower digestive system; musculoskeletal system; and cardiovascular system. Topics include fluid and electrolyte imbalance acid/base imbalance and coeliac disease, ulcerative colitis, Crohn's disease, musculoskeletal system, dyslipidaemia and atherosclerosis.

BMS 211 Foundations of Biomechanics 6cp

Autumn Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: BMS101 or EDUP131

Exclusions: EDUP235

Assessment: Mid Session Examination 35%; Quiz 15%; Final Examination 50%

Subject Description: This subject introduces fundamental biomechanical principles to provide a basis for understanding the causes and effects of human motion. The subject is an extension of the basic principles of human structure and function studied in Systemic Anatomy and will include: (i) an introduction to analysis of movement; (ii) basic biomechanical principles of motion; and (iii) subjective analysis of movement.

BMS 242 Exercise Physiology 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs of Lectures, 3 hrs Practical per week

Pre-requisites: BMS202

Exclusions: EDUP234

Assessment: Mid Semester Exam 15%; Topic Debate 30%; Laboratory Manual 15%; Final Exam 40%

Subject Description: This subject extends the study of human structure and function into the work and exercise domains. Areas to be studied include energy liberation and metabolism, applied muscle physiology and applied cardiorespiratory physiology.

BMS 300 Anatomy II (Regional Anatomy) 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours of Lectures, 2 hours Practical per week

Pre-requisites: BMS101 or EDUP131

Assessment: Dissection 15%; Practical Exam 25%; Theory Exam 60%

Subject Description: This course will teach detailed morphology and general pathology of human visceral organs. Clinical symptoms caused by visceral organ diseases will be explained in relation to particular region. It is a very practical course and leans towards advanced anatomy and common visceral organ diseases. The course will provide you with a detailed morphology of the head, neck, thorax, abdomen, and pelvis with particular emphasis upon the viscera. Hence, it is a necessary pre-requisite for students to have the knowledge of system anatomy (BMS101-Systemic Anatomy). You will be led, step by step, to learn the gross morphology of individual regions. The regional anatomy differs from the systemic anatomy because it focuses on the specific region linking to the understanding of the clinical problems. During the lecture you will be told firstly the location of the specific organ and its neighbouring structures, and then their blood supply, venous and lymphatic drainage, and nerve innervation. We then describe relevant visceral organ pathology and to certain extent of histology. Finally, common clinical symptoms to that specific region will be introduced. The knowledge you learn from this course will allow you to explain some common clinical health problems, which you may meet in day-to-day life. During the practical classes we will teach tissue-dissection skills and how to localise the projections of visceral organs.

BMS 302 Research Topics 8cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 1 semester at approx 1 day per week

Pre-requisites: BIOL214 and BMS202; or credit average and permission of subject coordinator.

Restrictions: A quota may apply in BMS302 each semester.

Exclusions: Quota may apply.

Assessment: Literature critique 20%; Final Research Poster (Group) 20%; Final Report (Individual) 60%

Subject Description: This subject provides an opportunity for students to participate in a research project in one of the discipline areas; Biomedical Science, Exercise Science and Rehabilitation, Nutrition and Dietetics or Occupational Health and Safety. Students will gain experience in experimental design, data collection, analysis and interpretation and report writing plus oral and poster presentation. The subject is

particularly recommended for students intending to undertake further under- or post-graduate research based studies.

BMS 303 Research Topics in Exercise Science 8cp

Spring Wollongong On Campus

Contact Hours: 1 semester at approx 1 day per week

Pre-requisites: BEXS351

Restrictions: A quota may apply depending upon demand.

Assessment: Literature Critique 20%; Research Poster 20%; Final Report 60%

Subject Description: This subject will provide an opportunity for students to conduct a research project in one of the following broad areas of Exercise Science: Exercise Physiology, Biomechanics, Functional Anatomy, Exercise Rehabilitation and Motor Control and Dysfunction. Topics covered will include: research design; development of research hypotheses and research proposal documents; data collection and analysis through use of wave form analysis statistical and spreadsheet software packages and the interpretation of research data within a final research report.

BMS 304 Research Topics in Nutrition and Dietetics 16cp

Spring Wollongong On Campus

Contact Hours: 2 hours of Tutorials, Weeks 1-4 and 11-13

Pre-requisites: BMS312

Restrictions: Quota may apply.

Assessment: Report 80%, Poster 20%

Subject Description: The subject will introduce students to specific areas of research practice in the field of nutrition and dietetics. Topics will be negotiated based on the current research activities of the metabolic research centre and its associates. Students will join a particular project and undertake certain tasks under the supervision of a designated staff member. Students will be required to collect and analyse data and report on their findings to the research team.

BMS 310 Community and Public Health Nutrition 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours Seminars / Lectures per week

Pre-requisites: POP222 or PHN203

Assessment: Assignment 1 40%; Assignment 2 15%; Final Exam 45% (Submission of some assignment work via WebCT).

Subject Description: Key areas of community and public health nutrition include nutrition surveillance, food policy, program planning and health promotion. There will be a focus on community nutrition practice, covering such topics as maternal and infant nutrition, school based nutrition programs, diabetes education and the health of older people in the community.

BMS 311 Nutrients and Metabolism 8cp

Autumn Wollongong On Campus

Contact Hours: 4 hours of Lectures, 2 hours Practical per week

Pre-requisites: BIOL214 and BMS202; or equivalent

Exclusions: GHMA931

Assessment: Examination 40%, practical assessment 30%, presentations 10% and reports 20%.

Subject Description: This subject covers the need for nutrients and how the human body metabolizes these nutrients. It begins with basic concepts such as bioavailability of nutrients from food. It then focuses on specific nutrients, namely carbohydrates, folate, plant sterols, phytoestrogens and fats, of which there is no recommended dietary intake (RDI). The overall aims are: 1. to understand the relationships between intake of nutrients and health status and 2. to develop an appreciation for the development of an RDI for a nutrient. Please note that this is a core subject for all of the University of Wollongong's nutrition degrees and hence it is tailored for nutrition students.

BMS 312 Research in Human Nutrition 8cp

Autumn / Annual Wollongong On Campus

Contact Hours: 8 x 4 hour workshops

Pre-requisites: STAT151 or STAT252

Assessment: Literature review 20%; scientific report 40%; presentation of proposal 20%; research proposal 20%

Subject Description: This subject will introduce students to a range of key areas of research in human nutrition. Beginning with an overview of nutrition research and the development of literature reviews, topics will include diet intake methodology, the use of nutrient databases, biomedical assays and indicators, epidemiological and ethnographic approaches as they relate to nutrition.

BMS 341 Clinical Biomechanics 8cp

Spring Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: BMS211 or EDUP235, and BMS203

Exclusions: A quota may apply in any one year.

Assessment: Assignment 40%; Quiz 10%; Final Exam 50%

Subject Description: This subject aims to extend the student's knowledge of musculoskeletal functional anatomy and biomechanics attained in BMS203 and BMS211, respectively, and to apply this knowledge in learning how to quantitatively assess human movement. Emphasis within the subject will be directed towards developing the required knowledge and skills to be able to measure, analyse and interpret data characterising both normal and pathological human motion. The subject will consist of the following content: (1) measurement in exercise science; (2) quantitative methods of analysing human motion including anthropometry, kinematic analysis (still, video, and cine photography), kinetic analysis (dynamometry and inverse dynamics), electromyography, pressure measurement, and balance assessment; (3) theoretical and practical concerns in processing raw data characterising human motion; and (4) clinical applications of quantifying human motion.

BMS 342 Advanced Exercise Physiology 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours Lectures, 3 hours Practical per week.

Pre-requisites: BMS242

Assessment: Mid-semester examination (multiple choice) 20%; Laboratory report 20%; Seminar 20%; Laboratory attendance 5%; Final examination (oral) 35%

Subject Description: While we are adapted to a more sedentary lifestyle, exercise provides a stimulus which pushes physiological function to extreme levels, providing a unique window through which the impact of stress upon human function may be explored. The knowledge of physiological function during rest and exercise stress, under various environmental conditions, is important as a basis for the optimisation of human existence, and, as such, forms an integral part of a sound physiological curriculum. The theme of this subject is to develop an understanding of physiological function under stress across the age and health spectra in groups which include the elderly, adolescent, the athlete and those with underlying pathology.

BMS 344 Cardiorespiratory Physiology 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours Lectures, 3 hours Practical per week

Pre-requisites: BMS202

Assessment: Group Presentation 15%; Written Assignment 20%; Laboratory Participation and Exercises 15%; Final Exam 50%

Subject Description: Typical content: Cardiovascular physiology including: structure; the ionic basis of cardiac electrical activity; the cardiac pump; the electrocardiogram; peripheral vascular system; control of cardiac function; vascular control and cardiovascular responses to stress within normal and abnormal function. Respiratory physiology including: structure; ventilation and diffusion; pulmonary blood flow; ventilation-perfusion relationships; gas transport to the periphery; the pulmonary pump; control of ventilation and responses to stress within normal and abnormal function.

BMS 345 Advanced Topics in Pathophysiology 8cp

Spring Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: BMS204

Restrictions: No less than credit average in 2nd year subjects.

Assessment: Assessment in this subject is based on a formal written examination (40%) and on two written and oral assignments (60%). Note that completion of all assignments is required to pass this subject unless medical certificates or other relevant documentation are provided.

Subject Description: This subject introduces students to scientific research within the area of pathophysiology. Topics will vary from year to year depending upon the availability of staff but all will emphasise current literature investigating the physiological mechanisms underlying human disease states. The subject is particularly designed for exceptional students who may be contemplating entering a postgraduate research program at the completion of their degree.

BMS 346 Motor Control and Dysfunction 8cp

Spring Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: BMS202 or BMS352

Assessment: Mid session and practical exams 45%; Final exam 55%

Subject Description: This subject will provide knowledge of the neurophysiological basis of the control of both normal, and dysfunctional human motion.

Topics covered will include an in-depth study of the anatomy and neurophysiology of the motor control system, the neurophysiological basis of the major disorders of human motion and techniques for the recording and analysis of normal and abnormal movement patterns.

BMS 352 Fundamentals of Neuroscience 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs Lectures, 2 hrs Practical per week

Pre-requisites: BIOL103 or BMS112

Assessment: Written Examinations 50%; Practical Examination 25%; Written Paper 25%

Subject Description: Students will gain familiarity with the physiology and the anatomy of the central nervous system. Labs will consist of a detailed study of the functional anatomy of the human brain, including tracing sensory and motor pathways and understanding neuroanatomical techniques. In addition to integrating anatomical function, lectures include aspects of neural development, molecular and cellular mechanisms of signal transmission, CNS coordination with autonomic and neuroendocrine systems and the study of the neural bases for selected behaviours and neurological disorders.

BMS 354 Practicum in Exercise Science 8cp

Annual Wollongong On Campus

Contact Hours: 1 hour per week Session 1; 2 hours per week plus Placement Session 2

Pre-requisites: BMS203 and BMS242

Co-requisites: BEXS351

Exclusions: For Bachelor of Exercise Science and Rehabilitation students only

Assessment: Seminar (verbal) 20%, Seminar (written) 20%, Report 60%. Satisfactory/Unsatisfactory grade awarded.

Subject Description: Students will gain practical experience and expertise in the application of the knowledge base acquired in Exercise Science. This practicum will emphasise the utilisation of exercise as an intervention to maintain and improve the health and fitness of apparently healthy individuals. Specific problems related to human performance in the sport and health care industry, will be addressed using a multidisciplinary approach.

BMS 401 Honours 48cp

Annual Wollongong On Campus

Pre-requisites: Minimum credit average in the last year of the undergraduate program

Assessment: Final Seminar 15%; Thesis (including viva voce) 85%

Subject Description: The student will be required to write a research proposal and a thesis on an approved topic embodying the results of their supervised research. In addition, the student will be required to participate in a seminar program.

BMS 402 Joint Honours in Biomedical Science and Another Discipline 24cp

Annual Wollongong On Campus

Pre-requisites: Minimum credit average in final year of undergraduate program

Assessment: Biomedical Component - Final Seminar 15%; Thesis (including viva voce) 85%; or as arranged with other unit.

Subject Description: See BMS401.

BND 433 Communication in Health Care Practice 8cp

Annual Wollongong On Campus

Contact Hours: 4 hours of Lectures / Seminars per week

Co-requisites: BND434 or GHMA934

Restrictions: For Nutrition and Dietetics students or authorized postgraduates.

Assessment: Small Group Assessment 35%; Counselling Assessment 35%; Team Assessment 30%

Subject Description: The subject will introduce students to the theory and practice of communication in the professional work environment, emphasising successful communication in a range of contexts. These include client counselling, small group education, community consultation, participation in meetings, working with the media and conflict resolution. In order to promote teamwork and group skills, the subject is taught on a small group basis, and the student should prepare for each activity. In order to promote an understanding of how people learn in small groups, students are asked to keep a reflective journal and to critique the process at the completion of the subject.

BND 434 Dietetics 8cp

Autumn Wollongong On Campus

Contact Hours: 6 hours Lectures / Seminars per week

Pre-requisites: BMS311 and BMS312

Co-requisites: BMS310

Restrictions: For Nutrition and Dietetics students or authorized postgraduates.

Assessment: Ready reckoner assignment 10%; Food group assignment 15%; Case Studies 30%; Final Exam 45%

Subject Description: Dietetics concerns the manipulation of food and dietary data with the aim of supporting nutritional health. This subject focuses attention on the nutritional needs of individuals, in clinical and community health settings, where nutritional intervention will improve or support the quality of life. This subject will draw upon much of your undergraduate and postgraduate studies. In particular you should revise your understanding of nutrition through the life cycle, human physiology and metabolic biochemistry.

BND 435 Food Services and Dietetics Management 8cp

Autumn Wollongong On Campus

Contact Hours: 6 hours Lectures / Practicals / Seminars per week

Pre-requisites: BMS310 OR BMS311 OR BMS312

Restrictions: For Nutrition and Dietetics students or authorized postgraduates.

Assessment: Menu Planning Assignment 25%; Multiple Choice Quiz 10%; Group Consultancy Project 25%; Management Assignment 15%; Cookery Assignments 25%

Subject Description: The subject focuses on the development of small and large scale cooking skills, menu planning and standard recipe manipulation in keeping with dietetic modifications. There is some skills development in

managing the provision of meals via an institutional food service. Aspects of organisational design, leadership, motivation, negotiation, resource management, decision making and power will be explored.

BND 437 Practical Studies in Nutrition and Dietetics 24cp

Autumn / Spring Wollongong On Campus
Annual

Contact Hours: 16 weeks Full Time Practical Placement

Pre-requisites: BND433 and BND434 and BND435

Restrictions: For Nutrition and Dietetics students or authorized postgraduates.

Assessment: 100% practical experience. Grade of Satisfactory or Unsatisfactory given

Subject Description: This subject comprises a practicum of at least 16 weeks duration which is spent in hospitals, community health centres, and other food-related organisations. Students will be under the supervision of experienced practitioners appropriate to the placement requirements. This placement is designed to develop the student's skills and competencies in a range of areas including specialised therapeutic diets and the provision of community nutrition programs. It also provides the students with opportunities to rehearse and demonstrate both interviewing and counselling skills, as well as information and behaviours required to allow the Dietitian to operate as an independent professional. Awareness of, and behaviours consistent with the knowledge of ethics requirements, confidentiality, accountability and other responsibilities of the autonomous professional operating either independently or as a member of a multidisciplinary team should be demonstrated by the student.

EDUP131 Systemic Anatomy 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs of Lectures, 3 hrs Practical per week

Exclusions: BMS101

Assessment: Practical Exam 45%; Theory Exam 50%; Spot Test 5%

Subject Description: This subject provides an introduction to the area of human gross anatomy through the study of each of the major systems of the body. In weekly practical sessions, students are exposed to anatomical structure through examination of both cadaveric specimens, radiographic images, histological slides, audiovisual materials and anatomical models. Major topics include the skeletal, muscular, nervous, cardiovascular, respiratory, digestive and urogenital systems.

EDUP132 Physiology I 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours of Lectures, 3 hours Practical / Tutorials / Computer Lab per week

Exclusions: BMS112

Assessment: Theory Exam 65%; Practicals 35%

Subject Description: Following an introduction to the cellular, physicochemical and homeostatic principles essential to an understanding of physiology, specific systems will be investigated in detail. These topics will include: nervous, muscular, cardiovascular, respiratory and reproductive systems; digestive processes and energy balance.

The practicals will exemplify lecture material, tutorials will concentrate on concepts introduced in pracs, graphic analysis and data handling.

EDUP234 Exercise Physiology 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours of Lectures, 3 hours Practical, 1 hour Tutorial per week

Pre-requisites: EDUP132

Exclusions: BMS242

Assessment: Lab Manual 15%; Presentation 30%; Library Journal Task 15%; Final Exam 40%

Subject Description: This subject extends the study of human structure and function into the work and exercise domains. Areas to be studied include: energy liberation and metabolism; applied muscle physiology and applied cardiorespiratory physiology.

EDUP235 Biomechanics For Educators 6cp

Autumn Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: EDUP131 or BMS101

Exclusions: BMS211

Assessment: Mid Session Exam 35%; Quiz 15%; Final Examination 50%

Subject Description: This subject introduces fundamental biomechanical principles to provide a basis for understanding the causes and effects of human motion. The subject is an extension of the basic principles of human structure and function studied in Systemic Anatomy and will include: (1) an introduction to analysis of movement; (2) basic biomechanical principles of motion; and (3) subjective analysis of movement.

NURSING

NURS100 Foundation Studies 6cp

Intake C Wollongong On Campus

Intake D Bega On Campus

Restrictions: Certificate (Level IV) Enrolled Nurses only

Assessment: Major Assignment - Portfolio 60%, Minor Assignment 40%

Subject Description: The aim of this subject is to introduce students to different types and sources of knowledge that can be used in nursing. Specifically the issues dealt with will be examined in relation to the responsibility of a registered nurse and safe practice. Information literacy will be intertwined throughout the subject.

NURS162 Effective Communication in Health Care Relationships 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hours of Lectures, 2 hours Tutorials per week.

Exclusions: NURS122, NURS132

Assessment: Presentation & Essay 20%, Clinical Practice Assignment 40%, Final Exam 40%

Subject Description: This subject aims to provide students with an introduction to theoretical concepts of interpersonal communication, an understanding of the importance of interpersonal skills in health care, beginning skills for relating to patients/clients and the fundamentals of professional presentation skills. An awareness of self, the concept of the professional relationship and the therapeutic use of self will also be important themes in this subject. The theory will be used to underpin the development of a range of interpersonal skills necessary for effective communications in contemporary health care settings.

NURS163 Fundamentals of Nursing 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials, 2 hours Lab per week plus 2 weeks Practicum

Exclusions: NURS121, NURS132

Assessment: Vital Signs Assignment 20%, Client Assessment Assignment 30%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: This subject will provide a foundation for safe and effective nursing practice for all other nursing care subjects. It will introduce students to the roles and functions of the nurse and critical thinking skills. The theoretical foundation provided will promote the development of clinical skills and reflective practice. Application of these skills and practices will occur in supervised clinical practicum in appropriate areas.

NURS164 Patterns of Knowing in Nursing 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials per week

Exclusions: NURS122, NURS132

Assessment: Minor Assignment 15%, Major Assignment 35%, Examination 50%.

Subject Description: The general aim of this subject is to introduce students to different types and sources of knowledge capable of being used in nursing. Specifically, this subject will deal with ethical issues in nursing and the fundamental knowledge of common law and legislation required for safe practice. Topics to be discussed include: ethical and legal responsibilities and nurses; tensions between personal ethical commitments and legal obligations; the relationship between nurses' knowledge, and ethical and legal obligations.

NURS165 Primary Health Care Nursing 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hours of Lectures, 2 hours Tutorials per week

Exclusions: NURS325

Assessment: Seminar Debate 40%; Debate Plan 10%; Literature Review 30%; Reflection 20%.

Subject Description: This subject will examine the Primary Health Care Model of health as described by the World Health Organisation, and will explore the nurse's role within the model. The focus of this subject will be the exploration of the nurse's role in the promotion of health for individuals, families

and communities. Nurses will gain skills in health promotion and the planning and evaluation of health promotion activities.

NURS166 Medical/Surgical Nursing 1 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours of Lectures, 2 hours of Tutorials, 2 hours Lab per week plus 2 weeks Practicum

Pre-requisites: NURS163

Co-requisites: SCIE121 or BMS112, SCIE122 or BIOL103

Exclusions: NURS121, NURS132

Assessment: Critical Analysis Assignment 30%, Mid-session Quiz 20%; End of Session Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: This subject is designed to build upon the content of NURS163 Fundamentals of Nursing in that it examines the prescription of nursing care once client needs have been established using holistic nursing assessment criteria. In doing so it seeks to prepare participants for supervised clinical practice in medical/surgical settings throughout the total program.

NURS227 Human Bioscience 3 6cp

Autumn Wollongong On Campus

Autumn Bega On Campus

Contact Hours: 4 hours of Lectures, 3 hours Practical per week

Pre-requisites: SCIE122

Subject Description: Gives students an understanding of the structure and functioning of the human body. The major emphasis is on physiology rather than anatomy. All the organ systems of the human body are studied and appropriate links are made with both pathophysiology and human development.

NURS240 Current Services in Aboriginal Health 6cp

Not on Offer in 2004

Subject Description: Differences between rural and urban patterns of Aboriginal health, including community based and mainstream models of Aboriginal health service delivery will be examined.

NURS242 Functional Community Structures 6cp

Autumn Wollongong On Campus

Contact Hours: n/a

Subject Description: This subject focuses on needs assessment techniques. Involves the analysis and planning of local program development, relevant health promotion strategies and program evaluation.

NURS243 Special Topic 6cp

Spring Wollongong On Campus

Contact Hours: n/a

Subject Description: This subject examines social factors affecting illness patterns. Health area analyses, epidemiological considerations and relationships between health, illness and lifestyle. Submission preparation is addressed.

NURS262 Medical / Surgical Nursing 2 6cp

Autumn Wollongong On Campus

Autumn Bega On Campus

Contact Hours: 2 hrs lecture; 2 hrs tutorial; 2 hrs lab; 2 weeks practicum

Pre-requisites: NURS 166, SCIE 121

Exclusions: NURS 222

Assessment: Essay 30%, Calculations Test 10%, End of Session Examination 60%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: Medical/Surgical Nursing 2 is a clinically orientated subject that will require the student to integrate concepts related to the biophysical, patho physiological, pharmacological, psychosocial and cultural diversity dimensions of individuals and families. This subject will provide the student with an opportunity to apply their understanding of the control mechanisms of the body which maintain homeostasis and coordination and relate these to fluid and electrolyte balance, renal function, neurological and endocrine control and movement. This subject includes the study of normal and abnormal pathophysiology across the life span. This subject will also examine in detail the role of the nurse in assessing people with alterations in fluid and electrolyte balance, renal function, coordination, control and movement: identifying actual and potential problems for these people, making clinical decisions within a professional, ethical and legal framework; and collaborative care incorporating relevant diagnostics and therapeutics.

NURS263 Mental Health Nursing 1 6cp

Autumn Wollongong On Campus

Autumn Bega On Campus

Contact Hours: 2 hrs lecture; 2 hrs tutorial; 2 hrs lab; 2 weeks practicum

Pre-requisites: NURS162, NURS166

Exclusions: NURS223

Assessment: Tutorial Presentation 20%, Essay 30%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of clinical competency profile, ANCI Competencies are also assessed.

Subject Description: This subject will introduce the students to the concept of mental health, mental disorders and the provision of care for people who are affected by these disorders. Students will be given an overview of the forces that have shaped mental health services in Australia today. The subject will cover the affects that various mental disorders and substance related disorders have on the population and the impact this has on nurses working in the health field.

NURS264 Reflection and Practice 6cp

Spring Wollongong On Campus

Spring Bega On Campus

Pre-requisites: NURS164

Exclusions: NURS327, NURS330

Assessment: Active Tutorial Participation 20%, Logical Argument Exercise 30%, Reflective Journal and related exercises 50%.

Subject Description: This subject has three main foci: the development of skills of reflection, not only directly on clinical nursing practice but within the student as a person in general;

the development of critical thinking skills, particularly in relation to logical thought and the recognition of logical argument within the work of others; and, the development of skills in presenting logical arguments to others. It builds on skills dealt with earlier in the programme related to the identification, accessing and evaluation of clinically relevant literature. It therefore serves to provide an insight into the concept of "intellectual craftsmanship" and its relevance to nursing practice.

NURS265 Nursing Therapeutics 6cp

Spring Wollongong On Campus

Spring Bega On Campus

Pre-requisites: NURS166

Exclusions: NURS226

Assessment: Assignment 40%, 2 Discussion Reports 20%, End of Session Examination 40%

Subject Description: Nursing therapeutics further develops insights into the nurse's role in administering medications and the use of alternate therapies in care of the patient. Pharmacokinetics will serve as the basis for examining major drug groups with particular emphasis on patient education about drugs, side effects, toxic effects and manifestations, and drug interactions. Alternative therapies shall also be explored in relation to the amelioration of patient problems in collaboration with and separate from allopathic therapies. These alternative therapies will include herbal medications, vitamin and mineral supplementation, naturopathy, aromatherapy, therapeutic touch, meditation and acupuncture. Overall the intention is to enable students to consider ways in which the ethos underpinning alternative therapies (eg. Holism and client-centredness) can and should be expanded into care.

NURS266 Medical / Surgical Nursing 3 6cp

Spring Wollongong On Campus

Spring Bega On Campus

Contact Hours: 2 hrs lecture; 2 hrs tutorial; 2 hrs lab; 2 weeks practicum

Pre-requisites: NURS262

Exclusions: NURS222

Assessment: Assignment 50%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: Medical/Surgical Nursing 3 is a clinically orientated subject that will require the student to integrate concepts related to the biophysical, pathophysiological, pharmacological, psychosocial and cultural diversity dimensions of individuals and families. This subject will provide the student with an opportunity to apply their understanding of the control mechanisms of the body which maintain homeostasis and coordination and relate these to people with alterations in oxygenation, perfusion, ingestion and elimination. This subject includes the study of normal and abnormal pathophysiology across the life span. This subject will also examine in detail the role of the nurse in assessing people with alterations in oxygenation, perfusion, ingestion and elimination: identifying actual and potential problems for these people, making clinical decisions within a professional, ethical and legal framework; and collaborative care incorporating relevant diagnostics and therapeutics.

NURS267 Family and Maternal Health Nursing 6cp

Spring Wollongong On Campus

Spring Bega On Campus

Contact Hours: 2 hrs lecture; 2 hrs tutorial; 2 hrs lab; 2 weeks practicum

Pre-requisites: NURS262

Exclusions: NURS131

Assessment: Case Study 35%, Mid-Session Quiz 15%, End of Session Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: The subject will introduce the student to concepts of family in its contemporary forms and to skills that will enable them to effectively care for women and their babies during the childbearing period, under the supervision of certified midwives. It will describe physical and psychological changes that occur in a variety of pregnancy circumstances. The nurse's role in the family's experience of pregnancy and childbirth will be explored and professional, legal, ethical and cultural diversity will be discussed. Factors affecting family health will be addressed in the context of the childbearing period and early childhood.

NURS322 Developmental Disability Nursing 6cp

Autumn Wollongong On Campus

Autumn Bega On Campus

Contact Hours: 2 hrs lecture; 2 hrs tutorial; 2 hrs lab; 2 weeks practicum

Pre-requisites: NURS262, NURS263 and NURS267

Assessment: Essay 40%, Tutorial Presentation 20%, Examination 40%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: This subject provides a theoretical and practical introduction to the field of developmental disability. Particular focus will be given to the concepts of normalisation and integration of people with disabilities into society.

NURS328 Management in Nursing 6cp

Spring Wollongong On Campus

Spring Bega On Campus

Contact Hours: 2 hour of Lectures, 2 hours of Tutorials per week

Pre-requisites: NURS226, NURS267

Subject Description: This subject focuses on the working environment of the nurse, and a review is made of models of nursing intervention and of issues which have an impact upon work practices, including hospital evaluation, evaluation of nursing practice, and occupational health and safety.

NURS341 Special Topic 8cp

Autumn Wollongong On Campus

Contact Hours: n/a

Pre-requisites: NURS243

Subject Description: This subject enables students to focus on an area of policy, education or management of relevance to the functioning of Aboriginal families/communities. Strategies that take into account changing patterns of health service provision will be examined.

NURS343 Indigenous Community Development: Theory and Practice 6cp

Spring Wollongong On Campus

Contact Hours: n/a

Subject Description: Students will apply the principles of primary health care to design and develop a project for an Indigenous community.

NURS344 Community Health: Theory, Research & Practice 6cp

Not on offer in 2004

Subject Description: This subject guides students through an analysis of the health needs of an Indigenous community and implementation of a project developed in NURS343.

NURS362 Continuing, Rehabilitative and Palliative Care Nursing 6cp

Autumn Wollongong On Campus

Autumn Bega On Campus

Contact Hours: 2 hrs lecture, 2 hrs tutorial, 2 hrs lab, 2 wks practicum.

Prerequisites: NURS262, NURS263

Assessment: Essay 50%, Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: There are a number of chronic health conditions that are commonly encountered by nurses. These conditions are particularly, but not only prevalent in the aged population. This is a clinically orientated subject which examines a number of issues related to chronic health conditions, particularly the goals of aged, rehabilitative and palliative care. The student will have the opportunity to integrate knowledge gained from previous subjects into the care of the person with a chronic disorder. This subject will consider a detailed examination of the role of the nurse in assessing and identifying problems associated with alterations in clients, and making clinical decisions about appropriate nursing interventions and outcomes.

NURS363 Therapeutic Use of Self 6cp

Autumn Wollongong On Campus

Autumn Bega On Campus

Contact Hours: 2 hours lecture, 2 hours tutorial per week.

Prerequisites: NURS123, NURS162, NURS262, NURS263

Assessment: Reflective Journal/Diary 20%, Essay 30%, Examination 50%.

Subject Description: In the process of communication we are required to deal with the emotions, thoughts and actions of people around us. Those we deal with in the health system are better served by clinicians who are aware of their own values and beliefs and willing to challenge and question those beliefs. However, for specific goal oriented and therapeutic communications in the professional context, our understanding is required to be more intensive. This subject will introduce students to concepts necessary for effective therapeutic communication and will enable students to develop a portfolio of skills to assist them in any generalist or specialist clinical practice area. These skills will be developed through the use of simulation that are based on specific clinical situations. The skills learnt in this subject are transferable to all areas of the health service and both

underpin and compliment therapeutic communication skills necessary for students who plan to specialise in mental health.

NURS364 Research Appreciation and Application 6cp

Autumn Wollongong On Campus

Autumn Bega On Campus

Contact Hours: 2 hours lecture, 2 hours tutorial per week.

Prerequisites: NURS262, NURS263, NURS264

Assessment: Essay 30%, Essay 70%.

Subject Description: A commitment to research based care is essential within nursing and midwifery, both for improved standards of care and the development of curious and critical practitioners. In order to make their commitment to research a reality, practitioners require not only insight into research methodologies but also the ability to critically analyse existing research. Strategies for increasing research awareness and widely disseminating existing findings should also be clearly understood. The focus of this module therefore, is the development of research appreciation and application skills, not the production of research workers.

NURS365 Mental Health Nursing 2 6cp

Spring Wollongong On Campus

Spring Bega On Campus

Contact Hours: 2 hrs lecture, 2 hrs tutorial, 2 hrs lab, 2 wks practicum.

Prerequisites: NURS263, NURS266, NURS267

Assessment: Assignment 30%, Tutorial Presentation 20%, Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: Students will be encouraged to develop their understanding of the concepts of mental health nursing. This subject will examine specific skills in identifying planning, implementing and evaluating care for individuals affected by a range of complex serious and enduring mental disorders, including dealing with the impact of these disorders on family members. This will involve students being directly involved in skills acquisition for the provision of care for these clients.

NURS366 Community Health Nursing 6cp

Spring Wollongong On Campus

Spring Bega On Campus

Contact Hours: 2 hours lecture, 2 hours tutorial 2 hours lab per week.

Prerequisites: NURS165, NURS266, NURS267

Assessment: Tutorial Presentation 20%, Assignment 40%, Examination 40%.

Subject Description: Students will have the opportunity to explore the diversity of nursing in a health care system that is becoming more community focussed and based. Students will obtain opportunities to develop and consolidate knowledge, attitudes and skills in the nursing of people with more complex conditions in unpredictable community environments.

NURS367 Medical/Surgical Nursing 4 6cp

Spring	Wollongong	On Campus
Spring	Bega	On Campus

Contact Hours: 2 hrs lecture, 2 hrs tutorial, 2 hrs lab, 2 wks practicum.

Prerequisites: NURS266, NURS267

Assessment: Assignment 50%, Examination 50%, 100% clinical attendance and satisfactory completion of a clinical competency profile, ANCI competencies are also assessed.

Subject Description: Medical/Surgical Nursing 4 is a clinically orientated subject that will facilitate the student to integrate concepts related to the biophysical, pathophysiological, pharmacological, psychosocial and cultural diversity dimensions of individuals and families. This subject will enable the student to synthesise knowledge and skills gained from the previous Physiological Nursing subjects to high dependency patients. This subject will also examine in detail the role of the nurse in assessing people with injury and multi-system disorders; identifying actual and potential problems for these people, making clinical decisions within a professional, ethical and legal framework; and collaborative care incorporating relevant diagnostics and therapeutics.

NURS401 Nursing Honours 48cp

Annual	Wollongong	On Campus
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Contact Hours: 3 hours per week

Pre-requisites: Completion of the requirements for the Bachelor of Nursing degree

Subject Description: This course is designed to provide supervision for a beginning researcher, through individual mentoring and group seminars. The major component of the course is to guide the student through the research process, including formulating testable questions from the research literature; devising appropriate methods to test these questions; obtaining ethics committee approval; data collection and analysis; oral presentation of results; and report writing. Students will develop and conduct a research project resulting in a thesis presentation.

POPULATION HEALTH

POP 101 Population Health - current health issues and their determinants 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hours of Seminars, 1 hour of Tutorials per week

Assessment: Assignments, Group presentation, Exam

Subject Description: Weekly seminars on major population health issues in Australia will be presented by academic staff, leading health professionals and others, including community advocates and (from time to time) those with personal experience of the condition. The latest evidence on the determinants of health issues will be examined, together with implications for specific population groups (e.g. indigenous Australians and the elderly) and provision of services in rural and urban areas. Ways in which these health issues can be approached will be discussed. Weekly tutorials will examine the links between health and political, social and other factors.

POP 102 Sex, drugs and rock'n'roll; public health perspectives 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hours of Lectures, 1 hour of Tutorials per week

Assessment: Two written assignments, Group presentation, Exam

Subject Description: This subject introduces students to two important contemporary health areas; one related to licit and illicit drug use, including cannabis, ecstasy, alcohol and tobacco; and the other related to sexual and reproductive health in the era of HIV/AIDS. Looks at health consequences, the role of advertising, theories of addiction, law enforcement strategies, health prevention and promotion approaches, and the importance of gender in negotiating sexual relationships. Includes finding and evaluating current public health information.

POP 103 Introduction to Health Behaviour Change 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hours lecture, 1 hour tutorial per week.

Assessment: Literature review (40%), Group project (40%), Group presentation (20%)

Subject Description: This subject introduces students to the theories and strategies of health behaviour change at the levels of the individual, the group, and the community. The subject will focus on the application of psychological theories and principles to the practice of public health and nursing, with emphasis on the use of behaviour change theories and strategies in various clinical nursing settings and health promotion contexts and in culturally diverse communities.

POP 201 Contemporary population health problems 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hrs seminar, 1 hr tutorial per week.

Pre-requisites: POP101

Subject Description: Weekly seminars on current population health problems will be presented. Examples will be drawn from within Australia and internationally. Topics will illustrate themes such as the effects of poverty or inequity on health, the populations at risk, the meaning and proof of causality and the way that this information may inform preventive or treatment efforts. The concepts of risk of disease or illness and of burden of disease will be introduced and the possibility that these influence policy and resource allocation will be discussed.

POP 202 Promoting Healthy Lifestyles 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hrs seminar, 1 hr tutorial per week.

Pre-requisites: 24 cp at 100 level

Assessment: Essay 25%, Group Assignments 45%, Exam 30%

Subject Description: Health promotion is a risk management strategy that deals with the environmental and educational supports that can assist individuals, groups and communities

to improve their health. Individuals, groups and populations will be considered. Theoretical and practical aspects of behaviour change and community development will be addressed. The problems of assessing public health interventions will be explored through an examination of evidence from health intervention studies and the options for such studies. Communication of risk is an essential component of health promotion and will receive particular emphasis in this subject.

POP 203 Health Policy 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs seminar, 1 hr tutorial per week.

Pre-requisites: At least 12 credit points at 200 level, POP201

Assessment: Test 20%, Essay 30%, Assignment 50%

Subject Description: This subject examines health and health care from policy and structural perspectives. First, health policy at a number of levels (governmental and non-governmental) relating to health and health care services will be described and critiqued. Roles and responsibilities of agencies responsible for health matters in Australia will be examined. Second, health policy as a strategy for the management of population health risk will be explored using both theoretical approaches and practical examples. The processes of policy formation will be analysed. Key contemporary policy examples will be examined.

POP 204 Epidemiology 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week.

Pre-requisites: STAT151, PSYC123 or STAT131

Subject Description: The epidemiological approach to the study of disease and illness will be taught. The level of evidence of a number of study types (e.g. cross-sectional, case control, cohort, intervention studies) will be presented in the context of public health problems. Sources of bias (confounding and effect modification) and causality will be covered. Screening for disease, and associated concepts (sensitivity, specificity, predictive value, ROC curves) will be discussed.

POP 220 Mass Media and Population Health 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week.

Assessment: Two essays, written project, oral presentation.

Subject Description: This unit examines the effects of media on population health - from the negative impact of advertisements for cigarettes, alcohol and junk food to the (hopefully) positive impact of public health campaigns. The subject covers commercial and social advertising, program and editorial content, media advocacy, and social marketing; and presents case studies of current media coverage and advertising campaigns to demonstrate the effects of media on health and social behaviour. Students will develop skills in media analysis, the development of communication campaigns, and dealing with the media.

POP 221 Behaviour Change for Population Health 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial per week.

Assessment: Two essays 60%, written project 20%, oral presentation 20%.

Subject Description: This subject introduces and builds on the theories and strategies of health behaviour change at the levels of the individual, the group or community and the population. The subject will focus on the application of psychological theories and principles to the practice of nursing and public health, with emphasis on the use of behaviour change theories and strategies in various public health and health promotion contexts and in culturally diverse communities. The subject also reviews the ethical and practical issues inherent in endeavouring to persuade people to change their health-related behaviours.

POP 222 Current Issues in Food and Nutrition 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 1 hr tutorial and 2 hrs seminar in some weeks.

Assessment: A combination of three in-class quizzes, an independent activity and an assignment.

Subject Description: This subject incorporates an overview of nutrients important to human health and their metabolism. It introduces students to ideas on the causes, nature and effect of a number of current food and nutrition issues. Examples will be drawn from Australia and overseas. Students will critically discuss the role of influential factors, including: interaction of biological, lifestyle and sociocultural aspects of human behaviour; changes in the nature of the food system; role of government and professional groups; and consumer interests.

POP 301 Project and Program Design, Management and Evaluation 8cp

Not on offer in 2004

Pre-requisites: POP201, POP203

Subject Description: This subject will examine the process of planning and design (identification of core information, analysis of need, setting goals, objectives, strategies, budgets, resource considerations) for health projects. Program evaluation concepts, development of monitoring and evaluation plans and data management will be discussed. Students will critique project proposals and develop skills in proposal writing and presentation.

POP 302 Analysis and Interpretation of Evidence 8cp

Not on offer in 2004

Pre-requisites: POP201, POP204

Subject Description: This subject develops skills in analysing evidence for health care questions. Concepts of evidence based practice and systematic reviews will be taught. Topics will include, defining a question, systematic reviews, pitfalls in critical appraisal, meta-analysis, calculation of effect sizes, evaluating effectiveness, implementing evidence-based practice. Students will undertake systematic reviews for frequency of disease, diagnosis and prognosis, practice guidelines and management of disease.

POP 325 Aboriginal Health Issues 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hours of Seminars per week**Pre-requisites:** 24 credit points at 200 level**Assessment:** Three written assignments and a seminar presentation**Subject Description:** This subject examines the health status of Aboriginal Australians from a historical perspective, using relevant insights from the experiences of other indigenous populations; explores the causes of Aboriginal health problems, the political and economic context of health, the role of culture, and access to health services and critiques current strategies to improve health.**POP 331 Population Health Project A 24cp****Autumn/ Spring** Wollongong On Campus**Annual** Wollongong On Campus**Contact Hours:** Refer Dept.**Pre-requisites:** POP301, POP302**Restrictions:** Entry will be by selection and dependent on availability of appropriate projects and supervision.**Assessment:** Project Proposal 20%, Literature Review 20%, Oral Presentation 20%, Report 40%**Subject Description:** Students with a credit average or above will be able to choose from a list of projects nominated each year by academic staff who will act as supervisors. These projects may include involvement in a population health program, gaining practical skills in program development, implementation or evaluation, or in other applied research projects, such as policy development or analysis. Other projects may involve investigating a population health problem or issue using appropriate methodologies. Projects may be located within health services or related organisations. Opportunities to locate in rural areas will be actively supported. Students will normally work in small project groups. Students undertaking a project which involves a placement in a NSW Health Department facility will be required to undergo a Criminal Record Check. Evidence of vaccination status may be required. Students undertaking a project which involves contact with children, completion of the Prohibited Employment Declaration form is required.**POP 332 Population Health Project B 8cp***Not on offer in 2004***Pre-requisites:** POP301, POP302**Subject Description:** Students will be able to undertake a limited project, focussing on either the analysis of an existing data set or the analysis of policy documents, or a critical review of the literature addressing a current population health problem or question. Suitable projects will be nominated each year by academic staff who will act as supervisors.**POP 401 Honours 48cp****Annual** Wollongong On Campus**Pre-requisites:** An undergraduate degree in a relevant discipline approved by the Head of the Graduate School of Public Health.**Assessment:** Thesis 70%, other written work 30% plus two presentations.**Subject Description:** The Honours program is an individual research endeavour under supervision. The candidate is

encouraged to research a contemporary issue within the research area of members of the Graduate School of Public Health. It is expected that there be both a theoretical and empirical content to the project. Guidelines for this subject are available from the Coordinator. Seminars are held in both sessions to evaluate the research proposal and to assess progress. The student is required to pass an examination of the detailed research proposal before about one third of the research time has passed. The final assessment of the subject combines an oral presentation with the written thesis.

PSYCHOLOGY**PSYC101 Introduction to Behavioural Science 6cp****Autumn** Wollongong On Campus**Autumn** Shoalhaven Flexible**Contact Hours:** 2 hours of Lectures, 1 hour of Tutorial per week**Subject Description:** This subject provides an introductory overview of areas of psychological investigation, introducing students to the study of individuals and human experience. It aims to acquaint non-psychology majors with the discipline, but may also provide additional background to students intending to specialize in psychology. Topics covered include learning, cognition, motivation, emotion, personality and lifespan development. The aim of this course is to introduce the major areas of study in the science of psychology.**PSYC121 Foundations of Psychology A 6cp****Autumn** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 1 hour of Tutorial per week**Subject Description:** This subject is a prerequisite for enrolment in second year psychology subjects. The subject introduces students to the science of psychology. The content will focus on the way the individual's biological and psychological systems function. In particular, the subject will examine the biological bases of human behaviour, lifespan development, motivation and emotion, personality, and consciousness.**PSYC122 Foundations of Psychology B 6cp****Spring** Wollongong On Campus**Contact Hours:** 2 hr of Lectures, 1 hrs of Tutorial per week**Co-requisites:** PSYC123**Subject Description:** This subject is a prerequisite for enrolment in second year psychology subjects. The subject examines the way in which individuals perceive and learn about their world, the ways in which group membership influences behaviour, the nature of psychological dysfunction, and the role of psychology in influencing health. Topics covered include learning, perception, memory, cognition, psychology of abnormality, social psychology, and human relations.

PSYC123 Theory Design and Statistics in Psychology 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour of Lectures, 1 hour of Tutorial per week

Subject Description: This subject is a prerequisite for enrolment in second year psychology subjects. The subject introduces students to scientific methods, the design of psychological research, data analysis and interpretation. Emphasis will be placed on the acquisition of fundamental statistical skills and a capacity for critical evaluation of research design, in both experimental and non-experimental applications. The link between psychological theory, method and analysis will be explored. Ethical issues in psychological research will be addressed.

PSYC216 Psychology of Physical Activity 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour of Lectures, 1.5 hours of Tutorials per week.**Pre-requisites:** (PSYC101) OR (PSYC121) OR (PSYC122) OR (PSYC123)

Assessment: Literature Review 15%, Presentation and Reflective Write-up 20%, Field Project Assignment 20%, Multiple Choice Quiz 20%, Final Exam 25%

Subject Description: PSYC 216 examines evidence on the health benefits of physical activity; how physical activity habits may be measured; how physical activity is distributed in populations; its major determinants; how psychological theories or models can guide interventions to promote physical activity; the evidence base on which interventions can be developed; and evidence on the outcomes of trials of interventions, including community, mass-media and public health policy initiatives.

PSYC231 Personality 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour of Lectures, 1.5 hours of Lab per week.**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: This subject provides overviews of, and bases of comparison between, many of the major approaches to personality. These include psychoanalysis, behaviourism, existentialism, personal construct psychology, neo-Freudian approaches, trait theory, social learning theory and humanistic psychology. Coverage includes both accounts of normal and abnormal personalities, individual differences, developmental dimensions, relevant research and therapeutic relevance where appropriate.

PSYC234 Biological Psychology and Learning 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hrs of Lectures, 1.5 hrs of Labs per week**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)**Assessment:** Lab Report, Quizzes, Exam

Subject Description: This subject introduces the physiological mechanisms underlying behaviour and changes in behaviour brought about by experience, as well as the psychophysiological measures frequently employed to study these processes. Topics include the nervous and endocrine

systems, arousal, attention, learning, memory, language, Pavlovian and instrumental conditioning, and habituation. Laboratory classes introduce the techniques and experimental methods used in the study of learning and psychophysiology, including the recording of the electrocardiograph, skin conductance and the electroencephalograph.

PSYC236 Cognition and Perception 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 1.5 hours of Labs per week.**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: This subject provides an overview of two broad content areas in experimental psychology. Perception is the study of how information is acquired from the environment through sensory organs. Cognition is concerned with the storage, manipulation and retrieval of such information. Lectures draw upon findings from both behavioural and neuropsychological studies. Topics covered include visual and auditory perception, memory, language, categorisation and reasoning. Students learn how to conduct, analyse and interpret experimental research.

PSYC241 Developmental and Social Psychology 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour of Lectures, 1.5 hours of Lab per week.**Pre-requisites:** (PSYC121 and PSYC122 and PSYC123)

Subject Description: The developmental component of the subject addresses the perceptual, cognitive, and social development of the child through childhood. It provides an introduction to the biological, cognitive, behavioural and sociocultural perspectives on development and reviews theory and research on key topics in the field. The social component of the subject forms the foundation for considering a range of topics about the individual in the group setting. The focus is on the individual in the social context and topics such as social cognition, attitudes, prejudice and group behaviour are considered.

PSYC246 Special Research Topic 6cp**Autumn / Spring** Wollongong **On Campus**
Annual**Contact Hours:** Refer Dept.**Pre-requisites:** Prior approval by Head of Department required.**Co-requisites:** Not to be counted with more than one other 200 level psychology subject.

Subject Description: On successful completion of this subject students will be able to identify the major steps necessary to carry out a research project in Psychology, including problem specification, surveying the existing literature, appropriate data collection and analysis techniques, and report writing. Students will understand the importance of team work and have demonstrated small group presentation techniques.

PSYC247 Statistics and Measurement 1 6cp**Autumn** Wollongong On Campus**Contact Hours:** 2x1 hr lectures and 1.5 hr tutorial weekly.**Prerequisites:** PSYC121 and PSYC122 and PSYC123**Assessment:** Refer Subject Outline

Subject Description: Students are introduced to fundamental concepts underlying measurement and quantification in psychology. This subject covers statistical methods used in psychology with an emphasis on choosing appropriate analyses for given research designs. The subject also introduces students to the concepts of testing and assessment in psychology, including the assessment of personality, ability and aptitude. The practical aspects of test administration and interpretation in organisational and clinical settings will be discussed, including ethical issues relating to psychological testing. Students will also obtain skills in using SPSS to analyse psychological data.

PSYC248 Statistics and Measurement 2 6cp**Spring** Wollongong On Campus**Contact Hours:** 2x1hr lectures and 1.5hr tutorial weekly.**Prerequisites:** PSYC247**Assessment:** Refer Subject Outline

Subject Description: This subject consists of two distinct but related components. In the first component students are introduced to a general linear modelling approach to analysis of variance and regression. In the second component students are introduced to the statistical theory underlying psychological testing, including classical and modern test theories. Students will experience extensive use of SPSS in analysing general linear models, and examining the psychometric properties of psychological tests.

PSYC315 Psychology of Abnormality 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour of Lectures, 1.5 hours of Lab per week**Pre-requisites:** 24 cp of PSYC at 200 level (excluding PSYC216)

Subject Description: This subject involves a systematic examination of the variety of mental disorders found in adults and children. In addition to the descriptive psychopathology, necessary to identify the disorders, contemporary issues relating to theories of causation and treatment are examined. In addition, clinical assessment and methods of therapeutic intervention make up an important component of this course.

PSYC317 Current Issues in Learning and Judgement 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hrs lecture, 1.5 hr practical per week.

Prerequisites: 24 credit points at 200 level (excluding PSYC216). For students who begin their degrees from 2003, this must include PSYC234 AND PSYC236. For students who began their degrees before 2003, this must include PSYC234 OR PSYC236.

Assessment: 4 laboratory exercises each worth 5% for a total of 20%; 1 laboratory report 30%; 1 final exam 50%

Subject Description: This subject will extend students' knowledge of psychology in the areas of human learning and

judgment. It provides a detailed examination of four areas : (i) implicit learning, (ii) human reasoning, (iii) judgement under uncertainty, (iv) causal learning. Students will be required to carry out a laboratory report on a topic relevant to the subject. In addition there will be a full program of experimental laboratory classes.

PSYC318 Change Throughout the Lifespan 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hr lecture, 5 x 3hr laboratories.**Prerequisites:** 24 cp of PSYC at 200 level (excluding PSYC216) including PSYC231**Assessment:** Refer Subject Outline

Subject Description: This subject focuses on the kinds of changes that occur to people throughout their life and ways to facilitate and cope with those processes. Changes in intelligence, personality and social interactions in adulthood and old age are considered. Theories concerning the nature of life-span change are addressed, along with relevant empirical studies. One approach to understanding and facilitating changes, personal construct psychology, will be considered in detail. Some personal exploration will be undertaken by those enrolled.

PSYC345 Memory and Language 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour of Lectures, 1.5 hours of Tutorials per week.**Pre-requisites:** 24 cp of PSYC at 200 level (excluding PSYC216) including (PSYC232 and PSYC236)

Assessment: Laboratory exercises 25%, Workshop experimental report 30%, Exam 45%

Subject Description: This subject will extend students knowledge of cognitive psychology from the framework acquired in PSYC236. It provides a detailed examination of four areas: (1) short-term memory, (2) reasoning, (3) the psychology of reading, and (4) connectionism. Students working in groups will be required to carry out a small original research project on a topic relevant to the course. In addition there will be a full program of experimental laboratory classes.

PSYC347 Assessment and Intervention 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 1.5 hours of Labs per week.**Pre-requisites:** 24 cp of PSYC at 200 level (excluding PSYC216)

Assessment: Agency visit and report, seminar, essay, final exam.

Subject Description: This subject is meant to provide students with an overview of the assessment procedures and intervention programmes commonly used, and the efficacy of these programmes for common psychological problems including anxiety, depression, eating, substance abuse, and common disorders among children. While different approaches to therapy will be briefly discussed, the strategies used in cognitive-behavioural assessment and therapy will be covered more extensively.

PSYC348 History and Metatheory of Psychology 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 1.5 hours of Labs per week**Pre-requisites:** 24 cp of PSYC at 200 level (excluding PSYC216)

Subject Description: This subject introduces (1) the origins and development of major approaches in modern psychology, and (2) important conceptual issues in psychology. It discusses the concepts needed to evaluate the theories, methods, accounts and practices that we encounter in psychology, and applies these concepts to various psychological problems. Topics include materialist and causal views of psychology, behaviourist analyses of mental processes, psychoanalytic explanation, rationalist and phenomenological accounts of mind and ethical and ideological considerations in psychology.

PSYC349 Visual Perception 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 1.5 hours of Labs per week**Pre-requisites:** 24 cp of PSYC at 200 level (excluding PSYC216) including (PSYC232 and PSYC236)

Subject Description: This subject covers the following aspects of visual perception - lightness and colour; motion; shape and object perception; depth and stereopsis; spatial and temporal resolution - and the applications of each, uniting them by focusing on the environmental variables to which the visual system is sensitive, and the neural mechanisms underlying these sensitivities.

PSYC350 Social Behaviour and Individual Differences 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hours of Lectures, 1.5 hours of Labs per week**Pre-requisites:** 24 cp of PSYC at 200 level (excluding PSYC216) including (PSYC232 and PSYC241)

Subject Description: This subject allows students to study selected topics in social psychology in more detail. The emphasis is on the extent to which one can explain social behaviours (eg. prejudice, crime, close relationships, particular adolescent behaviours) in terms of individual differences and personality traits. An integral part of the subject will include the formulation of a research proposal by each student.

PSYC352 Psychophysiology 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour of Lectures, 2 hours of Labs per week.**Pre-requisites:** 24 cp of PSYC at 200 level (excluding PSYC216) including (PSYC232 and PSYC234)

Subject Description: This subject concentrates on psychophysiology as the systematic examination of peripheral and central physiological correlates of perceptual and cognitive functioning. Students will attain a basic level of proficiency in the electrical recording and assessment of a range of autonomic measures (including muscle, respiratory,

cardiovascular, and electrodermal activity), as well as the traditional central indicators (EEG and event related potentials). Current research using these techniques will be examined.

PSYC354 Design and Analysis 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour of Lectures, 1.5 hours of Tutorials per week**Pre-requisites:** 24 cp of PSYC at 200 level (excluding PSYC216) including PSYC248

Subject Description: PSYC354 develops skills in the design and analysis of research investigations involving statistics. It is a pre-requisite for Psychology IV Honours. Statistical computing is an essential part of the course. Topics covered: statistical techniques in psychological research, experimental and observational research designs, analysis of survey data; analysis of variance and covariance; regression; factor analysis; multivariate analysis.

PSYC498 Psychology IV 48cp**Annual** Wollongong On Campus

Subject Description: Building on the first three years of the Bachelor of Psychology course, this subject will cover principal theoretical, empirical, and practical aspects of the areas in psychology that prepare students for work as psychologists: health psychology; counselling skills, in both client-centred and cognitive-behavioural orientations; child and adolescent psychology; psychological assessment; and professional skills for the psychologist. In addition, students will undertake an empirical research project of 8,000 words, under the supervision of an academic staff member.

PSYC499 Psychology IV Honours 48cp**Annual** Wollongong On Campus

Subject Description: Students will generally complete: a supervised 12,000 word Empirical Thesis; a supervised 6,000 word minor Theoretical Thesis, and three compulsory seminars in research, advanced methodology, and professional skills. Students may choose to replace the 6,000 word theoretical Thesis with an optional subject chosen from the following list: Assessment in Applied Psychology; Child and Adolescent Psychology; Cognitive and Affective Neuroscience; Counselling Psychology; Health Psychology; Models of the Human Brain and their Applications.

INFORMATICS SUBJECT DESCRIPTIONS

BIST400 Internet Science & Technology IV Honours 48cp

Annual Wollongong On Campus

Contact Hours: Refer Faculty

Prerequisites: Candidates who achieve a credit average or better in the Bachelor of Internet Science & Technology are eligible to enrol in an additional year of study towards a Bachelor of Internet Science and Technology (Honours).

Assessment: Refer Faculty

Subject Description: This Honours subject offers students the opportunity to study at an advanced level in areas of Internet Science and Technology. This subject will take advantage of specific knowledge and expertise within the Faculty. Students will acquire skills in communication and research methodology, as well as developing expertise in their chosen field of specialisation.

CSCI102 Systems 6cp

Spring Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega/ Moss Vale On Campus

Contact Hours: 4 hours per week

Assessment: Workshop Reports 10%; Assignments 40%; Exam 50%.

Subject Description: CSCI102 establishes the position of Computer Science and Information Technology in a non-programming context. Areas introduced include Human-Computer Interface, Information Modelling, Intelligent Systems, Networks, Operating Systems, Software Design and Development and Professional ethics, rights and responsibilities.

CSCI103 Algorithms and Problem Solving 6cp

Autumn /Spring Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega/ Moss Vale On Campus

Contact Hours: 4 hrs lecture; 2 hrs laboratory/tutorial per week

Assessment: Assignments (40%) Examinations (60%)

Subject Description: CSCI103 introduces the basic concepts of algorithms and their relationship to data structures and problem solving. This subject emphasises problem solving techniques leading to the development of algorithms rather than their implementation or a formal mathematical treatment of algorithms. Topics include sorting, searching and counting problems and the principal algorithms used in their solution. Common approaches to algorithm development and analysis will be examined.

CSCI112 Fundamentals of Computer Science 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: CSCI111 or CSCI114

Assessment: 6 Assignments - 40%; Final Examination - 60%

Subject Description: The concepts of algorithms and computability together with techniques for analysis of the efficiency and complexity of algorithms are studied. Logical formalisms and their application in computing environments and the use of logical reasoning in establishing the correctness of implementations of algorithms are discussed. The abstract models such as finite state machines, pushdown automata and Turing machines are treated.

CSCI114 Procedural Programming 6cp

Autumn /Spring Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega/ Moss Vale On Campus

Autumn Loftus On Campus

Contact Hours: 4 hrs lecture; 2 hrs laboratory/tutorial per week

Assessment: Assignments (40%) Examinations (60%)

Subject Description: CSCI114 introduces the procedural approach to program design and implementation. Covers basic language constructs for defining variables of built-in types, flow control constructs and simple I/O. Explores functional decomposition as a design technique, and the implementation of functions. Introduces simple user-defined data types and aggregates.

CSCI121 Computer Science 1B 6cp

Spring Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega/ Moss Vale On Campus

Contact Hours: 6 hours per week

Pre-requisites: CSCI111 or CSCI114

Restrictions: Note BUSS111 will NOT equip you for this subject's content

Assessment: Exam - 60%; Assignment - 40%

Subject Description: CSCI121 develops skills in object-based program design and implementation. Covers characterisation of abstract data types and their realisation as classes. Explores standard data types including lists, binary trees, queues.

Investigates implementation and efficiency of standard searching and sorting algorithms. Provides experience in the use of dynamic data structures.

CSCI124 Object Programming 6cp

Spring Wollongong On Campus

Contact Hours: 4 hrs lecture; 2 hrs laboratory/tutorial per week.

Prerequisites: CSCI111 or CSCI124 and CSCI103

Assessment: Exam 60%; Assignment 40%

Subject Description: CSC124 develops skills in object-oriented program design and implementation. Covers characterisation of abstract data types and their realisation as classes. Explores the implementation of standard data types including lists, binary trees, queues. Investigates implementation of standard searching and sorting algorithms. Provides experience in the use of dynamic data structures.

CSC1203 Algorithms and Data Structures 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hrs Lecture, 2 hrs Computer Lab per week.

Pre-requisites: CSC121 or CSC124

Assessment: Assignment 40%; Exam 60%

Subject Description: Approaches to analysing algorithm complexity, introduced in first year subjects, will be reviewed. The complexity class of algorithms will be introduced as one of the major consideration in problem analysis and program design. The use of abstract data types as a design technique, and their implementation in solutions to problems, will form a part of the practical work. Code will be implemented in the form of reusable C++ classes and/or C modules.

CSC1204 The C Family and Unix 6cp

Autumn / Spring Wollongong On Campus

Contact Hours: 6 hours per week

Pre-requisites: CSC121 or CSC124

Assessment: Laboratory Assignments- 40%; Final Examination - 60%

Subject Description: Students will be introduced to the C programming language and the UNIX operating system. Particular attention will be paid to the differences that exist between C and C++ and ways in which C++ constructs can be implemented in C. The tools available in the UNIX environment for program development and maintenance will be covered plus the methods of interfacing code to operating system functions, and libraries such as the C++ Standard Template Library.

CSC1205 Development Methods & Tools 6cp

Spring Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: CSC121

Assessment: Examination - 50%; Assignment - 50%

Subject Description: To provide students with practical skills and knowledge of systems analysis and design techniques. Students will be given instruction in a particular, standard analysis and design method. The techniques and phases of the selected method will be treated thoroughly and in detail. The instruction will utilise case studies, and it will be supported by Computer Aided Software Engineering (CASE) technology. In addition to individual learning, students will be introduced to group analysis and design activities.

CSC1212 Interacting Systems 6cp

Autumn Wollongong On Campus

Contact Hours: 5 hours per week

Pre-requisites: CSC131 or CSC121

Assessment: Assignments - 40%; Final Exam - 60%

Subject Description: This subject examines the relationships between the program and its environment: with the user via a consideration of HCI and graphical interfaces; with the

computer via the operating system; with data via the file system and with other programs via the network.

CSC1213 Java Programming & the Internet 6cp

Autumn / Spring Wollongong On Campus

Contact Hours: 3 hours Lectures, 2 hours Labs per week.

Pre-requisites: CSC121 or CSC124

Assessment: Assignments - 50%; Exams - 50%

Subject Description: This subject provides: 1. an introduction to the Java language and some of its standard class libraries; 2. experience with object oriented design and implementation techniques; 3. an understanding of the Internet and its importance to modern software systems. Topics will include: Java language, subset of Java class libraries (windowing, graphics, networking, threads), object oriented design and implementation, Internet issues, basics of TCP/IP protocols, Web technologies, HTML and Javascript, CGI programming, introduction to security issues.

CSC1214 Distributed Systems 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: CSC121

Assessment: Assignments - 40%; Exam - 60%

Subject Description: CSC1214 introduces basic concepts of internetworking and distributed systems. Physical communications media are introduced, then the focus shifts to network protocols (TCP/IP), then client-server model and the sockets interface. Other topics to be covered include network addressing and security (firewalls). Real-world programming examples from Unix and Windows-NT environments will be presented. Students will undertake laboratory exercises on Linux-based PCs.

CSC1222 Systems Development 6cp

Not on offer in 2004

Prerequisites: CSC1102 and (CSC124 or CSC121)

Assessment: Assignments 40% Final Exam 60%

Subject Description: CSC1222 provides a framework for understanding and developing the necessary skills to successfully undertake the major third year software project. The emphasis of this subject is on the design and development process and its application to real world problems. The subject combines a formal introduction to the discipline of software engineering with a practical application of its methods.

CSC1235 Databases 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours Lecture, 2 hours Computer Lab per week.

Pre-requisites: CSC121

Assessment: Assignments 25%; Class tests 15%; Final Examination 60%.

Subject Description: This subject investigates three major areas of modern database systems: 1. design of relational databases; 2. programming of relational databases; 3. concurrency control and data recovery in database systems. Topics will include: Introduction to conceptual database modelling; Principles of relational database model; Structured Query Language (SQL) and its procedural extensions (PL/SQL, Embedded SQL, JDBC); Database server programming;

Normalization of relational databases; and Transaction management and recovery in database systems.

CSCI236 3D Modelling and Animation 6cp

Not on offer in 2004

Pre-requisites: 12 credit points of 200 level CSCI or IACT subjects

Exclusions: CSCI463

Assessment: 5 Laboratory Assignments - 40%; Final Examination - 60%

Subject Description: This subject provides students with a hands-on introduction to the use of computers for developing models of three-dimensional objects and viewing them in 3D as still images and animations. Topics covered include basic modelling primitives, from polygons to spline surfaces; tools to modify simple objects; surfacing concepts such as textures and bump maps; basic lighting of scenes; the animation process including key frames, articulated structures, camera movement and morphing; lighting effects such as volumetrics and radiosity. The subject uses the industry standard software package LightWave.

CSCI262 System Security 6cp

Spring Wollongong On Campus

Contact Hours: 3 hrs lecture, 1 hr tutorial per week.

Prerequisites: CSCI121 or CSCI124

Assessment: Assignments 40% Final examination 60%

Subject Description: The subject covers some fundamental computer security technologies in the following aspects: (1) Operating system security such as physical security, file protections, system abuses, attacks and protections; (2) Database security including data integrity, data recover, data encryption/ decryption, access control, and authentication; (3) Mobile code security including malicious logic, host and mobile code protection, mobile agents' security. (4) Intrusion detection; (5) Security policies; (6) Security management and risk analysis.

CSCI311 Software Process Management 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week.

Pre-requisites: CSCI205

Assessment: Assignments 50%; Examination 50%

Subject Description: Software development is a difficult and challenging task. Apart from the most trivial of problems, the software development process is generally a collaborative rather than an individual effort. To manage the development of complex software artifacts, various principles and practices of software engineering have been formulated. Acquainting students with the principles and practices of managing the software development process is the primary aim of this subject.

CSCI313 Professional Programming Practices 6cp

Not on offer in 2004

Pre-requisites: CSCI204

Assessment: Assignments 60%; Exam 40%

Subject Description: The aims of this subject are to assist students in refining their programming skills and to develop awareness of issues important to professional programmers.

The focus will be predominantly on programming in C++. Topics will include more advanced language features, tools, and libraries.

CSCI315 Database Design and Implementation 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hrs lectures, 2 hrs lab class per week.

Pre-requisites: CSCI235

Assessment: 3 Assignments 30%; 2 class tests 20%; final examination 50%

Subject Description: This subject investigates the process of relational database design starting from conceptual database design, through logical database design up to and including physical database design, database tuning and administration. The topics will include conceptual database design based on Object Modelling Technique, methodologies for conceptual design, view integration, logical database design, database normalization and de-normalization, physical database design, generation of database applications, database tuning, design of distributed database systems.

CSCI317 Database Performance Tuning 6cp

Spring Wollongong On Campus

Contact Hours: 3 hrs lectures, 2 hrs lab class per week.

Prerequisites: CSCI235

Assessment: Assignments 20%; Tests 20%; Final exam 60%

Subject Description: The subject addresses the performance problems of relational database systems. In particular, it presents optimisation of query processing in relational database systems, performance tuning of database applications, transaction processing in database systems, optimisation of transaction processing, performance tuning of relational database servers, performance tuning of three tier database applications. Laboratory classes demonstrate the techniques used for elimination of performance problems in database systems. Oracle 9i database management system is used for demonstration purposes and all practical work in the subject.

CSCI321 Project 12cp

Annual Wollongong On Campus

Contact Hours: 1 hour lecture per week.

Pre-requisites: CSCI204 or CSCI213 and 18cp of 200 level IACT or CSCI subjects

Restrictions: Spring start is ONLY available to candidates who have 96cp of advance standing. As Web Enrolment is NOT possible for Spring start, see co-ordinators for details

Subject Description: Working in groups, students design, implement, and document a software system. Involves: project planning and scheduling, seminars and individual presentations, group coordination, research of proposed application domain, use of design methodologies, design documentation, coding, module and system integration, testing, verification, and implementation. A small number of project topics have been proposed. Students will form teams, each of which will design, implement and document a solution to one of the proposed projects. Teams will meet weekly with supervisors to discuss progress and problems.

CSCI322 Systems Administration 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week**Pre-requisites:** CSCI204 and 6 cp of 200-level CSCI subjects**Assessment:** Assignments 40%; Final Examination 60%

Subject Description: This subject will cover the practical and theoretical aspects of system administration. The various resource areas which have to be managed will be discussed and examined, and the possible methods of monitoring and controlling them in various systems will be investigated. The features unique to both single processor and networked systems will be investigated.

CSCI323 Artificial Intelligence 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week**Pre-requisites:** CSCI202 or CSCI204 and 6cp of 200-level Computer Science subjects**Assessment:** Final exam 60%, lab assignments 20%, project 20%

Subject Description: CSCI323 reviews the main components of Artificial Intelligence research including knowledge representation, reasoning, natural language understanding, and perception. Focuses on Expert Systems and the computational models they embody. Introduces the programming languages Lisp and Prolog.

CSCI324 Human Computer Interface 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week**Pre-requisites:** CSCI204 and 6cp 200 level CSCI subjects**Exclusions:** not to count with IACT403**Assessment:** Final Exam 40%; Assessment 60%

Subject Description: This subject examines the design evaluation and implementation of interactive computing systems for human use (HCI) and the major phenomena surrounding them. Also considered are joint performance of tasks by humans and machines, structure of human machine communication, social and organizational interactions with machine design, human capabilities to use machines including their learnability as well as algorithms and programming of the interface itself, engineering concerns that arise in designing interfaces, the process of specification design and implementation of interfaces and design tradeoffs.

CSCI325 Software Engineering Formal Methods 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lectures per week**Pre-requisites:** CSCI204**Co-requisites:** CSCI311**Assessment:** Exercise 30%; Essay 20%; Final Examination 50%

Subject Description: This subject introduces students to formal methods for software specification. The role of formal methods in the software development process is explained, and it is illustrated with case studies of the industrial application of formal methods. The subject uses the Z notation as an example of a formal specification technique, and software tools for the manipulation of Z specifications are introduced. Case studies in

the application of formal methods to safety-critical and real-time software systems are presented.

CSCI333 Compilers 6cp*Not on offer in 2004***Pre-requisites:** CSCI337

Subject Description: CSCI333 introduces the theories and practices of compiler and interpreter construction. Covers: lexical analysis, parsing, code generation, optimisation, symbol tables, and error detection.

CSCI334 Interfacing and Real Time Programming 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours Lectures, 1 hour Computer Lab per week.**Pre-requisites:** CSCI121**Assessment:** 5 Assignments @ 8% - 40%; Final Examination (3 hours) - 60%

Subject Description: The emphasis of this subject is on low-level interfacing of computer peripherals in high-level languages. Students will be required to complete a number of practical assignments. Topics to be covered will include: (a) IBM PC Programmer's model; (b) interrupt handling; (c) I/O registers; (d) data input, error detection and correction, filtering, storage and output; and (e) programmable chips for digital, serial, analog and disk I/O, graphics, memory management and real-time clocks. It should be noted that according to Course Rule 003 {Interpretation Point 2 (t)} each credit point for a single session subject has the value of about 2 hours per week including class attendance. Therefore, the amount of time spend on each 6 credit point subject should be at least 12 hours per week, which includes lectures/tutorials/labs etc.

CSCI336 Computer Graphics 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week**Pre-requisites:** CSCI204 and 6cp of 200-level CSCI subjects**Assessment:** Laboratory Assignments 5 @ 8%-40%; Final Examination - 60%

Subject Description: Introduction to computer representation of lines and points; mathematical models; transformations in 2 and 3 dimensions; homogenous coordinate systems; fill algorithms; solid modelling; hidden line and surface algorithms; lighting models; and current trends.

CSCI337 Organisation of Programming Languages 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours Lectures, 1 hour Computer Lab per week.**Pre-requisites:** CSCI121 or CSCI124

Subject Description: CSCI337 develops an understanding of major programming paradigms including imperative, functional, logical, object-oriented, and procedural paradigms. Introduces formal language specification. Covers language definition and syntax; data types and data structures, control structures and data flow; run-time considerations; and interpreted languages.

CSCI361 Computer Security 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lectures, 1 hour labs per week.**Pre-requisites:** CSCI204 and 6cp of 200-level CSCI subjects**Assessment:** Final exam - 70%; Laboratory Work - 30%

Subject Description: CSCI361 develops the knowledge and skills necessary to identify the security problems that may occur in a distributed computer environment, and then to devise means for countering the threats. Covers: Identification: passwords, challenge-response protocols Private Key; Cryptography: classical ciphers, Feistel cryptosystems Public; Key Cryptography: RSA, Merkle-Hellman, El-Gamal, Elliptic-Curve cryptosystems; Hashing: Birthday paradox, serial and parallel hashing, MD family, keyed hashing; Digital Signatures: generic, RSA, El-Gamal, blind, undeniable, fail-stop; Key Establishment; Protocols: classical key transport, DH agreement, Kerberos, SPX, STS protocol, BAN logic Access; Control: MAC, DAC, RBAC, implementations of access control, security kernel, Multics, UNIX, capabilities, access control lists; Network Security: IPsec, viruses, web security, copyright protection .

CSCI365 CSCI Honours Preliminary Project 6cp*Not on offer in 2004*

Subject Description: A supervised reading course for prospective Honours students. Under direction of a member of academic staff, students undertake a reading or small research project in an area of Computer Science not available by coursework. Introduction to research methodology.

CSCI368 Network Security 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture per week.**Prerequisites:** CSCI361**Assessment:** Assignment 40%; Exam 60%

Subject Description: This subject provides a survey of network security technologies, and explores them in practice. This includes but is not limited to, network-based threats, security failure in cryptographic and network protocols, authentication servers, certificates and public-key infrastructures, security provisions in communication protocols and standards, electronic mail security, firewalls and intrusion detection systems.

CSCI370 Special Topics in Computing Science A 6cp

Autumn Wollongong On Campus

Contact Hours:**Pre-requisites:** 12 credit points of CSCI or IACT @ 200 level

Subject Description: Topics selected from the areas of interest of staff members or visiting faculty. Consult the head of school for details.

CSCI371 Special Topics in Computing Science B 6cp*Not on offer in 2004*

Subject Description: Topics selected from the areas of interest of staff members or visiting faculty. Consult the head of school for details.

CSCI372 Special Topics in Computing Science C 6cp*Not on offer in 2003*

Subject Description: Topics selected from the areas of interest of staff members or visiting faculty. Consult the head of school for details.

CSCI373 Special Topics in Computing Science D 6cp*Not on offer in 2003*

Subject Description: Topics selected from the areas of interest of staff members or visiting faculty. Consult the Head of School for details.

CSCI399 Server Technology 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week**Pre-requisites:** 12cp at 200 level**Assessment:** Assessment - 30%; Final Examination - 70%

Subject Description: This subject provides a broad overview of the computing technologies that underlie e-commerce. Technical topics will include: protocols, web server configuration (Apache), introduction to domain name services (DNS), the Perl language, PHP scripting, and the Java technologies: servlets, Java Server Pages, Java/XML technologies, and a limited introduction to Enterprise Java Beans and .NET. Additional topics may include web services, peer to peer computing models, and other emerging technologies.

CSCI401 Computing Science IV Honours 48cp

Annual Wollongong On Campus

Pre-requisites: Candidates who achieve a credit average or better in the Bachelor of Computer Science or a major in computer science in another degree, are eligible to enrol in an additional years study towards a Bachelor of Computer Science (Honours) (BCompSc(Hons)).

Subject Description: The program of study for BCompSc(Hons), i.e., CSCI401 Computer Science IV Honours will include: 1. a 18 credit point project; 2. 30 credit points of 400/900 level subjects from the Computer Science Schedule; 3. With the permission of the Head of School, candidates may substitute up to 12 credit points of subjects with 300 level subjects from the the Computer Science Schedule or 400 level subjects from another discipline; 4. Attendance at a series of seminars on research methodology (including quantitative and qualitative analysis). Seminars will cover the purpose of research, formulating a research question, conducting a literature review and writing a research proposal. Students will learn how to design an appropriate research plan. Requirements for scholarly writing will also be discussed and the process of undertaking a research project will be analysed. Individual results for subjects attempted will not be released. Instead, the final result for CSCI401 will be calculated from the total results for the project and subjects.

CSCI405 Computer Science Joint Honours 24cp

Annual Wollongong On Campus

Assessment: written examination, seminar and thesis.

Subject Description: The thesis is usually integrated with the other academic unit. The subject comprises one half of CSCI401. A topic for the thesis will be determined in

consultation with the other academic unit. See the Computer Science co-ordinator for advice.

CSCI407 Corba and Enterprise Java 6cp
Spring Wollongong On Campus
Contact Hours: 2 hours Lectures plus independent work in the computer laboratories
Pre-requisites: 24 cp @ 300 level CSCI subjects
Exclusions: CSCI407
Assessment: A series of assignments totalling 100% with no one assignment exceeding 50% in value.
Subject Description: This subject introduces students to the "enterprise level" computing environments - Corba, and Enterprise Java Beans. It will also provide a more limited overview of general "web services" and related technologies. The emphasis is practical with students developing Corba applications with Java clients and C++ servers, and later creating and deploying complete EJB systems.

CSCI408 Distributed Java 6cp
Not on offer in 2004
Pre-requisites: 24cp@ 300level CSCI subjects
Exclusions: CSCI908
Assessment: A series of assignments totalling 100% with no one assignment exceeding 50% in value.
Subject Description: This subject provides students with a strong grounding in distributed object systems, using the inter-related Java based RMI, Jini, Javaspaces, and JXTA technologies as illustrations. The content will include an exploration of how to "objectify" a client-server distributed system, a reasonably detailed study of Java Remote Method Invocation, exploration of the Jini technology with emphasis on applications such as Javaspaces distributed computing, and an introduction to the latest Java based peer-to-peer systems.

CSCI425 Topics in Software Engineering 6cp
Autumn Wollongong On Campus
Contact Hours: 2 hours per week
Pre-requisites: 24cp @300 level
Assessment: Project Planning & Requirement Specifications - 20%; Project Architecture & Design - 10%; Project Testing - 20%; Configuration Management - 10%; Final Exam - 40%.
Subject Description: This subject examines the current state of software engineering both as an academic discipline and as a profession. The subject focuses on issues of requirements engineering, system procurement, and professional practice, and through case studies, the subject considers reasons for the failure and success of various software engineering projects.

CSCI444 Perception and Planning 6cp
Spring Wollongong On Campus
Contact Hours: 2 hours Lectures per week.
Pre-requisites: 24cp @300 level
Assessment: Assignments 100%
Subject Description: This subject explores ways in which a robot can combine data from variety of sensors to create or update a model of its environment, and then use this model to infer the consequences of proposed actions. The subject will cover the use of internal sensors, such as those measuring

odometry and location, and external sensors including those for touch, vision, and range finding.

CSCI445 Parallel Computing 6cp
Not on offer in 2004
Pre-requisites: 24cp @300 level
Assessment: Assignments - 40%; Exam - 60%
Subject Description: This subject presents different approaches to the construction of parallel algorithms and computer architectures. Both theoretical and practical aspects are covered, emphasis is placed on identifying the suitability of the approaches for specific applications.

CSCI446 Multimedia Studies 6cp
Autumn Wollongong On Campus
Contact Hours: 2hrs lecture, 1hr lab per week
Pre-requisites: 24cp @300 level
Assessment: Assignment 100%
Subject Description: This subject studies the creation and programming of digital media for multimedia applications. Multimedia systems combine images, graphics, sound and text to interactively communicate information. Each of these media has its own standards, algorithms and file formats. The foundations strand examines the principles of how media is created. The programming strand explores the programming of multimedia applications, using a multimedia applications such as QuickTime for Java. The practical strand explores the acquisition, encoding and editing of digital video and audio with professional tools, such as Final Cut Pro.

CSCI450 Software Requirements and Specifications 6cp
Spring Wollongong On Campus
Contact Hours: 2 Lectures hours per week
Pre-requisites: 24cp @ 300 level
Assessment: Assignments - 50%; Examination - 50%
Subject Description: Software development can be viewed as an activity in which useful things are built to serve recognisable purposes. For software developers, these "useful things" are a special kind of machine known as software systems, and the "purpose" of these machines is to help solve problems in some application domain. This subject emphasises the importance of understanding the application domains that software systems interact with and the problems we try to solve in these domains. The subject focuses on writing explicit and precise descriptions known as: (1) Requirements - descriptions of application domains and the problems to be solved there; (2) Specifications - descriptions of the interface between the machine and the application domain. The subject addresses techniques used to record, elicit, and reason about these descriptions. The subject examines the approach to Requirements and Specification techniques taken by a range of systems engineering methodologies. The concepts of method engineering are introduced and the role of software tools to support this activity is discussed.

CSCI457 Advanced Topics in Database Management Systems 6cp
Spring Wollongong On Campus
Contact Hours: 3 hours per week
Pre-requisites: 24cp @300 level

Assessment: Implementation Project - 20%; Mini Research Project - 30%; Final Examination - 50%.

Subject Description: This subject covers two advanced topics from modern database management systems: object-oriented databases and transaction management in database systems. The topics include the details such as design and implementation of object-oriented database systems, hybrid transaction management, optimistic transaction management, nested transactions, management of long transactions, and management of transaction in distributed systems.

CSCI463 Advanced Computer Graphics 6cp
Not on offer in 2004

Pre-requisites: 24cp @ 300 level

Exclusions: Not to count with CSCI236

Assessment: Assignment - 60% Examination - 40% (form of assessment to be confirmed with class)

Subject Description: In this subject students will learn how to use graphics techniques such as ray tracing and radiosity to produce highly realistic images with features such as shadows, reflection, refraction, texturing, penumbras and motion blur. The rendering algorithms and their underlying mathematics are covered with a practical component being the implementation of a ray tracer. Applications including scientific visualisation are also covered.

CSCI464 Neural Computing 6cp
Autumn Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: 24 cp @ 300 level

Assessment: Exam - 60%; Assignment - 40%

Subject Description: This subject introduces students to the basics of "soft" computing. Primary focus will be on artificial neural networks, with some attention also given to genetic algorithms, (evolutionary computing), fuzzy logic and neurofuzzy expert systems. These approaches will be compared and contrasted with heuristic, rule-based artificial intelligence methods, such as decision trees and case-based reasoning. Several application areas will be discussed, primarily pattern recognition and/or classification.

CSCI465 Design and Analysis of Algorithms 6cp
Not on offer in 2004

Pre-requisites: 24cp @ 300 level

Assessment: Assessment - 50%; Exam - 50%.

Subject Description: The objective of this subject is to develop the knowledge, skills and techniques for designing and analysing algorithms. Topics to be studied include: review of standard algorithm designs including divide and conquer, the greedy method, etc; complexity analysis and comparison of algorithms, number theoretical algorithms.

CSCI466 Coding for Secure Communication 6cp
Not on offer in 2004

Pre-requisites: 24cp @ 300 level

Assessment: Assignment - 50%; Exam - 50%

Subject Description: This subject provides a fundamental understanding of information protection and efficient coding strategies that can be used to ensure correctness, security and authenticity of data. It uses entropy as the universal measure of information to analyse and explore fundamental bounds on the

performance of secure and reliable storage and communication systems, and examine a range of coding schemes that form the main building blocks of such systems. It will include the following topics: i) redundancy in data and compression algorithm; ii) efficient error control strategies for secure and reliable communication and storage systems; and iii) coding methods for secrecy and authenticity.

CSCI467 Complexity Theory 6cp
Not on offer in 2004

Pre-requisites: CSCI361

Co-requisites: CSCI471

Assessment: Assignment - 50%; Exam - 50%

Subject Description: The subject introduces basic concepts of complexity theory. Topics include NP-completeness and NP-hardness, Cook's theorem and its implications concepts of indistinguishability and pseudorandomness, interactive proof systems and zero-knowledge protocols.

CSCI471 Advanced Computer Security 6cp
Spring Wollongong On Campus

Contact Hours: 2 hours lecture per week.

Pre-requisites: 24cp @300 level

Assessment: Assessment - 50%; Exam - 50%

Subject Description: This subject provides a review of computer security. Topics include: digital signatures, elliptic curve cryptography, El Gamal public key methods, the Advanced Encryption Standard (AES), Security Standards, Security Evaluation Standards, Linear Cryptanalysis, Differential Cryptanalysis.

ECTE101 Electrical Engineering 1 6cp
Spring Wollongong On Campus

Contact Hours: 78 hours per session.

Co-requisites: MATH142 or MATH161 or MATH188.

Exclusions: ELEC101

Assessment: See Subject Information Sheet those presented here are only a guide. Assessment: Practical attendance and performance - 10%; Practical (Reports) - 15%; Tutorial Tests - 7.5%; Tutorial Assignments - 7.5%; Examination - 60%.

Subject Description: ECTE101 aims to provide students with an understanding of the behaviour of basic electrical devices and circuits and with an introduction to the mathematical models used in computer, electrical, internet and telecommunications engineering. It will provide an introduction to electrical quantities and measurements; circuit analysis; electronic devices and circuits; an introductory overview of the frequency spectrum used for communications; the use of modulation and broadcast mediums, e.g., television and radio; wireless technology; and fixed networks. The practical component will cover basic electrical measuring, recording and display instruments; characteristics and measurements of circuit elements, analogue and digital electronic circuits, simple communications circuits.

ECTE150 Engineering Design and Management 1 6cp**Autumn / Annual** Wollongong On Campus**Contact Hours:** 78 hours per session.**Exclusions:** ELEC150

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 50%; Reports/Presentation(s) - 10%; Tutorial/Practical Assignments - 15%; Team Exercise - 25%.

Subject Description: The aim of ECTE150 is to provide students with an introduction to the communication, management and teamwork skills required of professional engineers. The subject will examine the role played by electrical engineers in society, their responsibility to the environment, and will show the importance of the professional code and ethics. Lectures will also examine and introduce management topics relevant to engineers. Laboratory activities will introduce basic measurement and computing skills.

ECTE181 WWW Engineering 6cp**Autumn** Wollongong On Campus**Contact Hours:** 78 hours per session.

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination - 60%, Assignment - 25% and Practical - 15%.

Subject Description: The aim of this subject is to provide students with a practical introduction to the World Wide Web and to a variety of tools useful in engineering the WWW. Topics covered will include: embedded servers; relevant standards; multimedia content and formats in use on the WWW, for example, MPEG, JPEG and ZIP compression formats; practical applications of compression; and modular level engineering of Java programs.

ECTE182 Internet Technology 1 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hr Lecture, 1hr Tutorial, 3hr Practical per week.

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination - 60%, assignment - 25% and practical - 15%.

Subject Description: This subject introduces students to the fundamentals of computer communications. These fundamentals are then used to outline the Internet Architecture, and describe its key components. Following this, the operation of the World Wide Web (WWW) will be detailed. Topics covered include packet switching, switched networks, layered protocols, Local and Wide Area networks, WWW operation, network components (e.g., routers), access technologies (e.g., modems). Laboratory exercises will illustrate key computer communications concepts.

ECTE195 Design and Management 6cp**Autumn** Wollongong On Campus**Contact Hours:** 71.5 hours per session.**Exclusions:** ELEC150, ELEC195

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Tutorials - 30%; Seminars - 20%; Practical - 20%

Subject Description: This subject provides an introduction to the communication, management and team work skills

necessary to implement typical IT projects for students in the BIST degree. It also seeks to provide students with communication and experimentation skills. Accompanying laboratory activities will introduce students to basic skills and concepts needed for internet performance measurements and monitoring.

ECTE202 Circuits and Systems 6cp**Annual** Wollongong On Campus**Contact Hours:** 65 hours per session.**Prerequisites:** ECTE101 and (MATH142 or MATH162 or MATH188)**Co-requisites:** MATH201 or MATH283**Exclusions:** ELEC201, ELEC202

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial assignments - 20%; Tests - 10%; Final Examinations - 70%.

Subject Description: Topics covered will include: dependent sources; circuit analysis techniques; operational amplifiers; feedback; energy storage elements L, C; natural, forced and complete response of first and second order circuits; steady state sinusoidal circuits-phasors; frequency response, Bode diagrams and filters; Laplace and Fourier approaches to system and signal analysis; and block and signal flow diagrams.

ECTE212 Electronics and Communications 6cp**Spring** Wollongong On Campus**Contact Hours:** 58.5 hours**Pre-requisites:** ELEC101 or ECTE101**Co-requisites:** ELEC202 or ECTE202**Exclusions:** ELEC211, ELEC212

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial assignments 10%; Laboratory work and Test 30%; Final Examination 60%.

Subject Description: The aims of this subject are: to provide students with an opportunity to develop an understanding of electronic circuit design using operational amplifiers as the building blocks and with an ability to analyse circuits using conventional methods; to introduce analogue modulation techniques and the circuit implementations required for analogue communications. Topics covered will include: using ideal operational amplifiers to construct: inverting and non-inverting amplifiers; summing amplifiers; integrators; comparators with and without hysteresis; peak detectors; and scaling adders; Digital-to-Analogue and Analogue-to-Digital conversion; determine the effect of the frequency response of non-ideal operational amplifiers and the effects of positive and negative feedback; signal representation in time and frequency domains; analogue modulation techniques (AM, FM); electronic circuit implementations of modulators and demodulators (AM, FM).

ECTE222 Power Engineering 1 6cp**Spring** Wollongong On Campus**Contact Hours:** 58.5 hours per session.**Pre-requisites:** ELEC101 or ECTE101**Co-requisites:** ELEC202 or ECTE202**Exclusions:** ELEC221, ELEC222

Assessment: See Subject Information Sheet those presented here are only a guide. Mid session test - 10%; Laboratory work and Test - 30%; Final Examination - 60%.

Subject Description: Topics covered include: Typical power system loads; basic structure of a power system; electric power generation; single and three phase systems. Power system equipment: transformers, switch gear and protection. Installation practice: voltage drops, power factor correction, tariffs, safety, earthing, protection equipment rating. Power quality: system disturbances, equipment susceptibility, improvement and instrumentation.

ECTE233 Digital Hardware 1 6cp

Autumn Wollongong On Campus

Contact Hours: 58.5 hours

Pre-requisites: ECTE150 or ECTE195 or CSCI111

Exclusions: ELEC231, ELEC233

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorial Tests - 10%; Laboratory work and test - 30%; Final examination - 60%.

Subject Description: Topics covered will include: combinational logic, simplification of logic expressions, Karnaugh maps; sequential logic, flip-flops, registers, clock, timing and synchronisation problems; sequential machines, Mealy and Moore machines, timing diagrams and state tables. Students will also be required to become proficient at writing simple programs for a microcontroller.

ECTE250 Engineering Design and Management 2 6cp

Spring/ Annual Wollongong On Campus

Contact Hours: 42 hours

Pre-requisites: ECTE150 or MGMT110; and MATH142 or MATH162 or MATH188

Co-requisites: ECTE202

Exclusions: ELEC250

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Reports (one per team per session) - 30%; Presentations (two per session) - 20%; Project Deliverables (two per session) - 20%.

Subject Description: ECTE250 will consist of a structured team design activity covering the first four phases of a product design cycle; conceptualisation, functional/target specification, design specification and detailed design. Products will be selected from a central theme. The team activity will be supplemented by lectures covering such areas as project planning, contracts/law, budgeting, quality, industrial and community relations, engineering ethics and social consequences. Student teams will undertake the entire project using staff as 'costed' advisors.

ECTE281 Embedded Internet Systems 6cp

Spring Wollongong On Campus

Contact Hours: 4.5 hours Lecture/Tutorial/Practical per week

Pre-requisites: ECTE101 or ECTE191 or ECTE196 or ECTE182

Assessment: See Subject Information Sheet those presented here are only a guide. Final examination - 60%; Individual and/or group assignments (involving theoretical and practical/laboratory projects) - 30%; Oral presentation - 10%

Subject Description: The aim of this subject is to provide students with an understanding of the concepts and typical applications of embedded internet real-time systems. In addition, the methodologies and tools used to design and

develop embedded internet real-time systems will also be covered. The subject will cover Web servers in embedded systems, embedded system configuration, real-time embedded databases, design for embedded internet, wireless embedded internet systems including WAP and Bluetooth technologies.

ECTE282 Internet Systems 6cp

Autumn Wollongong On Campus

Contact Hours: 4.5 hours per week

Pre-requisites: ECTE101 or ECTE196

Assessment: See Subject Information Sheet those presented here are only a guide. Final Exam - 60%; Assignments - 20%; Laboratory - 20%

Subject Description: This subject will examine Internet protocols, technologies and performance issues. In particular, the link layer technologies that underpin the Internet will be considered. Topics will include: TCP/IP, IP Addressing, Address Resolution Protocol (ARP), Asynchronous Transfer Mode (ATM), Ethernet, Gigabit Ethernet, Frame Relay, Congestion Control/Flow Control. The role of various standards bodies, e.g., Internet Engineering Task Force (IETF) and the International Telecommunications Union (ITU), will be examined. Laboratory exercises will illustrate the operation of key Internet protocols.

ECTE283 Internet Technology 2 6cp

Spring Wollongong On Campus

Contact Hours: 4.5 hours Lecture/Tutorial/Practical per week

Pre-requisites: ECTE101 or ECTE196

Assessment: See Subject Information Sheet those presented here are only a guide. Final Exam - 60%; Assignments - 20%; Laboratory - 20%

Subject Description: This subject examines recent Internet developments, particularly in access systems, quality of service deployment and scalable architectures. Emerging applications, such as Internet Telephony and Universal Multimedia Access (UMA) will be studied in depth, as well as the protocols that underpin them (e.g., routing, coding). Topics will include: OSPF, BGP4, Mobile IP, Integrated Services, Differentiated Services, Wireless Access Protocols, Simple Network Management Protocol (SNMP), Media Coding Schemes, RSVP, H.323 and SIP. Advanced laboratory exercises will illustrate the operation of various internet protocols.

ECTE290 Fundamentals of Electrical Engineering 6cp

Spring Wollongong On Campus

Contact Hours: 58.5 hours per session,

Pre-requisites: MATH141 or MATH161 or MATH187

Co-requisites: PHYS142 or PHYS143

Exclusions: ELEC290

Assessment: See Subject Information Sheet those presented here are only a guide. Practical Attendance and Performance - 13%; Practical Reports - 7%; Tutorial Assignment and Mid-session Test - 20%; Examination - 60%.

Subject Description: ECTE290 is offered as a servicing subject to students undertaking Bachelor of Engineering Degrees within the Faculty of Engineering. The aim of this subject is to provide students in other Engineering disciplines with an introduction to some basic concepts of electrical circuits, electrical measurements, instrumentation, data logging, and heavy current devices.

ECTE301 Digital Signal Processing 1 6cp**Spring** Wollongong On Campus**Contact Hours:** 4.5 hours per week.**Prerequisites:** Year 1 subjects or equivalent, ECTE212**Exclusions:** ELEC301**Assessment:** See Subject Information Sheet those presented here are only a guide. Tutorial Assignments - 10%; Laboratory Work and Test - 30%; Final Examination - 60%.**Subject Description:** Topics covered will include: sinusoids, spectrum representation, sampling and aliasing, FIR filters, frequency response, Z transform, bilinear transform, IIR filters, and spectral analysis.**ECTE313 Electronics 6cp****Annual** Wollongong On Campus**Contact Hours:** 57 hours per session.**Pre-requisites:** Year 1 subjects or equivalent, ECTE202 and ECTE212**Co-requisites:** ECTE344**Exclusions:** ELEC311, ELEC313**Assessment:** See Subject Information Sheet those presented here are only a guide. Tutorial Assignments - 10%; Laboratory work and Test - 30%; Final Examination - 60%.**Subject Description:** Topics covered will include: analysis and design of: multistage amplifiers, feedback amplifiers, sinusoidal oscillators, analogue filters, non-linear circuits and power amplifiers.**ECTE323 Power Engineering 2 6cp****Autumn** Wollongong On Campus**Contact Hours:** 58.5 hours**Prerequisites:** Year 1 subjects or equivalent, ECTE222 or MATH201 or MATH283**Exclusions:** ELEC322**Assessment:** See Subject Information Sheet those presented here are only a guide. Mid session test - 10%; Laboratory work and Test - 30%; Final Examination - 60%.**Subject Description:** Topics covered will include: induction and dc machines; elements of electric motor drives; power electronics.**ECTE333 Digital Hardware 2 6cp****Spring** Wollongong On Campus**Contact Hours:** 58.5 hours per session.**Pre-requisites:** Year 1 subjects or equivalent, ECTE233**Exclusions:** ELEC332, ELEC333**Assessment:** See Subject Information Sheet those presented here are only a guide. Tutorials - 10%; Laboratory Work and Test - 30%; Final Examination - 60%.**Subject Description:** Topics covered will include: computer architecture, central processing unit, memory (ROM and RAM), input/output devices; basic computer organisation, binary data and instruction codes, machine and assembly languages - instruction set, direct and indirect addressing; building computer systems from commercially available parts such as micro-processors and micro-controllers, static and dynamic memory, A/D and D/A converters, digital I/O, and serial communication integrated circuits.

Students will also be required to become proficient at interfacing a micro-controller with digital hardware and writing programs to control the hardware.

ECTE344 Control Theory 6cp**Autumn** Wollongong On Campus**Contact Hours:** 58.5 hours**Prerequisites:** Year 1 subjects or equivalent, ECTE202 and (MATH201 or MATH283)**Exclusions:** ELEC343, ELEC344**Assessment:** See Subject Information Sheet those presented here are only a guide. Tutorial Assignments - 10%; Laboratory Work and Test - 30%; Final Examination - 60%.**Subject Description:** Topics covered will include: mathematical modelling of physical systems; signal flow and state space representation of systems; steady state and transient analysis; root locus; frequency response analysis using Nyquist and Bode; design of PID, lag, lead, controllers using Bode and root locus methods; multiloop control.**ECTE350 Engineering Design and Management 3 6cp****Annual** Wollongong On Campus**Contact Hours:** 38 hours**Pre-requisites:** ECTE250**Co-requisites:** 15 credit points at 300-level ECTE subjects**Exclusions:** ELEC350**Assessment:** See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Reports (one per team per session) 30%; Presentations (two per session) - 20%; Project Deliverables (two per session) - 20%.**Subject Description:** ECTE350 will consist of a structured team design activity covering the final four phases of a product design cycle; continued detailed design, prototyping, testing/conformance, and sales/marketing. The team activity will be supplemented by lectures covering such areas as social and ethical considerations, psychology/ergonomics, accountancy, marketing, sales, and engineering test methodology. Student teams will undertake the entire project using staff as 'costed' advisers. In contrast with ELEC250, this subject emphasises the technical achievements of the group project.**ECTE363 Communication Theory 6cp****Autumn** Wollongong On Campus**Contact Hours:** 4.5 hours per week.**Prerequisites:** ECTE212 and (MATH142 or MATH162 or MATH188)**Co-requisites:** MATH201 or MATH283 or STAT131
Exclusions: ELEC361, ELEC363**Assessment:** See Subject Information Sheet those presented here are only a guide. Tutorials - 10%; Laboratory work and Test - 30%; Final Examination - 60%.**Subject Description:** Topics covered will include: Gauss' and Stokes' theorems; Maxwell's equations, wave equation, plane wave propagation, Poynting vector; fundamentals of waveguide and antenna design; noise temperature, gain, figure of merit; microwave propagation; digital modulation schemes; error correction coding; TDMA and CDMA.

ECTE364 Telecommunications Networks 1 6cp

Autumn Wollongong On Campus
Contact Hours: 54 hours
Prerequisites: MATH122 or MATH142 or MATH162 or MATH188 or STAT131

Exclusions: ELEC362, ELEC364

Assessment: See Subject Information Sheet those presented here are only a guide. Tutorials - 10%; Laboratory work and Test - 30%; Final Examination - 60%.

Subject Description: The aim of ECTE364 is to provide students with an understanding of the techniques that are used to provide communication between computer systems. Topics covered will include: coding, error detection and correction, serial communications, packet switching, protocols, modems, and computer networks.

ECTE371 Mechatronics Design 6cp

Annual Wollongong On Campus
Contact Hours: 1 hour Lecture, 2 hours Seminar per week.
Prerequisites: ENGG261

Co-requisites: ECTE344 and 12 credit points at 300-level MECH subjects

Assessment: See Subject Information Sheet those presented here are only a guide.

Examination (Lecture Material) 30%; Reports (one per team per session) 30%; Presentations (two per session) 20%; Project Deliverables (two per session) 20%

Subject Description: ECTE371 will include a structured team design activity covering the phases of a mechatronics product design cycle; including detailed design, prototyping, testing/conformance, and sales/marketing. Student teams will undertake the entire project using staff as 'costed' advisers.

ECTE381 Internet Engineering 1 6cp

Spring Wollongong On Campus
Contact Hours: 4.5 hours per week.
Prerequisites: ECTE292 or ECTE283 or ECTE364
Co-requisites: ECTE364

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 65%; Tutorials - 5%; Assignments - 15% and Practicals (including reports) - 15%.

Subject Description: The aim of this subject is to provide students with an understanding of the structure of the Internet and its basic engineering challenges. The subject covers the following topics: Internet architecture, Synchronous Digital Hierarchy and Gigabit Ethernet, Asynchronous Transfer Mode, the overlay and peer architectures, Multi-Protocol Label Switching, the principles of optical transmission, optical networking and photonic switching and introduction to traffic engineering and network planning.

ECTE391 Internet Technology Project 6cp

Not on offer in 2004

Pre-requisites: INFO202 and WAM of > 70 at the end of Year 2 full-time.

Assessment: See Subject Information Sheet those presented here are only a guide. Oral Presentation - 30%; Project and Report - 70%.

Subject Description: ECTE391 requires students to work on individual projects that may involve some background reading

and analysis, the development of hardware and/or the development of software. It will involve weekly tutorial sessions; a seminar presentation and report writing.

The aim of this subject is to provide an opportunity for students who have achieved the required pre-requisite to undertake an individual project and develop their initiative.

ECTE392 Wireless Internet 6cp

Autumn Wollongong On Campus
Contact Hours: 4.5 hours per week
Prerequisites: ECTE291 or ECTE282
Co-requisites: ECTE364

Assessment: See Subject Information Sheet those presented here are only a guide. Examination - 70%; Tutorials and Assignments - 30%.

Subject Description: The aim of this subject is to provide students with the knowledge to evaluate current and emerging trends in wireless networks in relation to the Internet. The following topics will be covered: wireless local area networks, personal area networking, mobility in the internet, wireless access protocols, internet in second and third generation mobile networks.

ECTE401 Fast Signal Processing Algorithms 3cp

Autumn Wollongong On Campus
Contact Hours: 4 hours weeks 1-6.

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Exclusions: ELEC402, ELEC401

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. It forms a useful basis for subsequent DSP applications subjects. The contents will consist of: Discrete Transforms, including: FFT, DFT, DCT, etc.; Wavelet transforms; Filter Design and Structures and Multirate Signal Processing (Interpolation, Decimation, etc.).

ECTE402 Stochastic Signal Processing 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Exclusions: ELEC402

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. It forms a useful basis for subsequent DSP applications subjects. The contents will consist of: stochastic signals; least squares analysis, including optimal linear filters; spectral analysis, including linear predictive analysis; and basic scalar quantisation schemes (e.g., PCM, DPCM, ADPCM).

ECTE403 Image and Video Processing 3cp

Spring Wollongong On Campus
Contact Hours: 4 hours weeks 8-13.

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. The contents will consist of: applying digital signal processing in image and video processing applications.

ECTE404 Adaptive Signal Processing 3cp

Autumn Wollongong On Campus

Contact Hours: 3 hours weeks 8-13.

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Exclusions: ELEC403

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. The contents will consist of: applying digital signal processing in adaptive signal processing (echo cancellation, channel equalisation, etc.) applications.

ECTE405 Speech and Audio Processing 3cp

Spring Wollongong On Campus

Contact Hours: 4 hours weeks 1-7.

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 311 or ECTE301

Exclusions: ELEC403

Assessment: See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.

Subject Description: The aim of this subject is to extend the digital signal processing knowledge gained in ELEC301 Digital Signal Processing 1. The contents will consist of: applying digital signal processing in speech and audio processing applications.

ECTE411 AC-Sourced Power Electronics 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC323 or 322 or 323 or ECTE323

Co-requisites: ELEC313 or 311 or ECTE313

Exclusions: ELEC411

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered in this subject include: ac-sourced power electronics devices and their main applications, ac to dc power conversion and its industrial applications, ac voltage controllers, high power conversion in electric power utilities, harmonics and current research developments.

ECTE412 DC-Sourced Power Electronics 3cp

Autumn Wollongong On Campus

Contact Hours: 3 hours weeks 1-7.

Pre-requisites: Year 2 subjects or equivalent, ELEC222 or ECTE222

Co-requisites: ELEC313 or 311 or ECTE313

Exclusions: ELEC412

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations 70%; Assignments 30%.

Subject Description: This subject will study power conversion circuits with dc-supplies and using modern power switching devices. Topics covered include: power switching devices and their application (diode, MOSFET, IGBT, gto), dc-dc conversion (choppers), including switch-mode power supplies, dc-ac conversion using inverters, including methods of pulse width modulation.

ECTE413 Micro-Electronics 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC313 or 311 or ECTE313

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments 30%.

Subject Description: The aim of this subject is to extend the electronics knowledge gained in ELEC313 Electronics. Topics covered will include: theory of operation of BJT and FET devices; the use of FET devices in analogue and digital circuits; CMOS logic family; oscillators; high frequency amplifiers; VLSI design techniques; gate arrays; programmable logic devices; memory cells. The practical component will consist of using Electronics Simulation Packages to (a) model circuits and examine their behaviour; (b) perform a logical design, (c) program the design into a programmable device and test its performance.

ECTE421 Power Quality 3cp

Spring Wollongong On Campus

Contact Hours: 3 hours weeks 8-13.

Pre-requisites: Year 2 subjects or equivalent, ECTE222

Co-requisites: ECTE301

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject will study the different types of systems which can propagate in the electric power supply, their origins and their effects on sensitive equipment such as computers, telecommunications systems, PLCs and variable speed drives.

The disturbances include harmonics, voltage sags, capacity switching transients, voltage unbalance, etc. Topics discussed will include: the ability of equipment to emit disturbances, its susceptibility, industry standards and design techniques to ensure standards are met.

ECTE422 Power Quality Monitoring 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC323 or 322 or ECTE323

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject will treat measurement techniques and waveform interpretation relevant to the operation of sensitive equipment with a non-ideal power supply. The different types of waveform disturbances and their characterisation will be discussed, such as harmonics, inter-harmonics, flicker and voltage sag. Relevant standards for signal analysis will be examined and their approach justified. There will also be a treatment of transducers.

ECTE423 Power Systems 3cp

Autumn Wollongong On Campus

Contact Hours: 3 hours weeks 1-7.

Prerequisites: Year 2 subjects or equivalent, ECTE222

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered in this subject include: an introduction to power systems comprising thermal and hydro power stations, transmission lines and distribution systems, renewable energy, other energy sources such as solar energy, windmills, sea waves and geothermal, computer applications in power systems planning, design, control and operation, review of basic analysis tools, reactive power management, load flow and fault analysis and flexible ac transmission technology, and environmental considerations.

ECTE424 Power System Abnormalities 3cp

Not on offer in 2004

Prerequisites: Year 2 subjects or equivalent, ECTE222

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered include: reliability concerns, insulation requirements and protection methods of energy systems. The design aspect of energy systems for reliable and economical energy supply, internal and external overvoltage protection of energy systems and terminal equipment, stability limits of energy systems and the application of electromagnetic transient programmes (EMTP) for insulation co-ordination will be discussed.

ECTE425 Industrial Drives and Actuators 3cp

Autumn Wollongong On Campus

Contact Hours: 3 hours weeks 8-13.

Pre-requisites: Year 2 subjects or equivalent, ECTE222

Co-requisites: ECTE344

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered in this subject include: selection of dc, ac motors (induction and/or permanent magnet) and actuators for industrial applications and the design of closed loop speed control systems for dc and ac motors. In ac motor control, field orientation will be given particular emphasis.

ECTE426 Power Equipment Design 3cp

Spring Wollongong On Campus

Contact Hours: 3 hours weeks 1-7.

Pre-requisites: Year 2 subjects or equivalent, ELEC323 or 322 or ECTE323

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments 30%.

Subject Description: Topics covered in this subject include: design aspects of transformers, ac motors and generators and industrial actuators for motion control. The design and analysis of magnetic circuits to meet requirements such as: torque/weight ratio, losses, heating and cooling will be addressed. Essentials of electromagnetic analysis using simulation software (e.g., finite element methods) will be covered.

ECTE431 Real-Time Computing 3cp

Autumn Wollongong On Campus

Contact Hours: 24 hours

Pre-requisites: Year 2 subjects or equivalent, ELEC333 or 332 or ECTE333

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to extend the digital hardware knowledge gained in ECTE333 Digital Hardware 2. Topics covered will include: real-time operating systems; interrupts; interfacing to real world signals; use of A/D and D/A converters; multi-tasking, multi-threading; clocks and timers; and direct digital control. The practical component will consist of writing real-time programs on DSP and micro-controller computer systems.

ECTE432 Computer Systems 3cp

Autumn Wollongong On Campus

Contact Hours: 24 hours

Pre-requisites: Year 2 subjects or equivalent, ELEC333 or 332 or ECTE333

Exclusions: ELEC432

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations 70%; Assignments 30%.

Subject Description: The aim of this subject is to extend the digital hardware knowledge gained in ECTE333 Digital Hardware 2. Topics covered will include: CPU organisation; complex instruction sets; reduced instruction sets; I/O structures; interrupts; direct memory access; intelligent peripherals; interfacing to real world signals; use of A/D and D/A converters; multi-processors; parallel DSP architectures. The practical component will consist of writing programs on micro-controller computer systems.

ECTE441 Intelligent Control 3cp

Spring Wollongong On Campus

Contact Hours: 24 hours – weeks 1-7

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC443

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The subject provides the knowledge and skills required to model, analyse and design a system using intelligent methods. The contents will consist of: introduction to fuzzy systems, introduction to artificial neural network, crisp

fuzzy control systems, adaptive fuzzy control systems, and neuro-fuzzy control systems.

ECTE442 Computer Controlled Systems 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC443

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject provides the knowledge and skills required to model, analyse and design computer controlled systems in the z-domain. The contents will consist of: Discrete time state space modelling of system, stability analysis in state space, controllability and observability, pole placement design and state feedback, state observer design.

ECTE443 Digital Control 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC443

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject provides the knowledge and skills required to model, analyse and design computer controlled systems in the z-domain.

The contents will consist of: Impulse sampling, stability analysis in the Z-domain, root locus analysis and design in the Z-domain, W-transformation, frequency response analysis and design in the Z-domain and current research developments.

ECTE444 Identification and Optimal Control 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC444

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The subject provides the knowledge and skills required to identify the model of a system and optimise its performance. The contents will consist of: system identification using the least square method and quadratic performance index; quadratic optimal control; Kalman filters; and applications of genetic algorithms in system identification and optimal control.

ECTE457 Thesis 18cp

Annual Wollongong On Campus

Contact Hours: 48 hours

Pre-requisites: All subjects to the end of Year 3 or equivalent

Co-requisites: 18 credit points at 400-level or CSCI311 and 12 credit points at 400-level

Exclusions: ELEC457

Assessment: The mark for each session will be calculated according to the following formula: Sessional mark = $0.6 * (\text{Supervisor's mark out of } 100\%) + 0.3 * (\text{Co-Supervisor's mark out of } 100\%) + 0.1 * (\text{Seminar Presentation out of } 100\%) - \text{Penalty points}$. Final mark = $0.35 * (\text{Autumn Session mark out of } 100\%) + 0.65 * (\text{Spring Session mark out of } 100\%)$.

out of 100%) + 0.1 * (Seminar Presentation out of 100%) - Penalty points. Final mark = $0.35 * (\text{Autumn Session mark out of } 100\%) + 0.65 * (\text{Spring Session mark out of } 100\%)$.

Subject Description: ECTE457 requires students to work on individual projects which may involve some background reading and analysis, the development of hardware, the development of software, or an experimental program. It will involve weekly tutorial sessions; presentation of seminars; and writing of reports. The aim of this subject is to provide an opportunity for students to undertake a major engineering project and develop their initiative.

ECTE461 Telecommunications Queueing Theory 3cp

Autumn Wollongong On Campus

Contact Hours: 24 hours – weeks 1-7.

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Exclusions: ELEC460

Assessment: See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.

Subject Description: The aim of this subject is to provide students with telecommunication engineering skills including analysis of delay and loss queueing systems, undertake Markov modelling and analysis, and calculate blocking probabilities of telephone switching equipment. Topics covered will include: queueing theory, Markov chain analysis, throughput and congestion analysis, Erlang and Engset distributions, blocking probability and overflow traffic.

ECTE462 Telecommunications System Modelling 3cp

Autumn Wollongong On Campus

Contact Hours: 24 hours – weeks 8-13.

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Exclusions: ELEC460

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments 30%.

Subject Description: The aim of this subject is to provide students with telecommunication engineering skills including skills to analyse and dimension telephone exchanges, trunk lines, Internet switches and circuit and packet switched networks. Topics covered will include: telephone and data networks and systems, mixed voice and data queueing systems, optimal capacity allocation, direct and alternate routing.

ECTE463 Transmission Systems 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Exclusions: ELEC463

Assessment: See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.

Subject Description: Topics covered include: Maxwell's equations, wave propagation in transmission lines, the Smith chart, wave guides and optical fibres. The aim of this subject is

to provide methods of characterising distributed passive transmission media such as transmission lines, wave guides, and fibre optics.

ECTE464 Antennas and Propagation 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Exclusions: ELEC463

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: Topics covered include: wave propagation in the air and signal radiation and antennas. The aim of this subject is to provide methods of characterising antenna systems for use in communications.

ECTE465 Wireless Communications 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to introduce wireless communication systems, including cellular telephony, personal communications, and wireless local area networks. The contents will consist of: mobile radio channel characterisation, channel access techniques used in wireless systems and error control coding. The taught concepts will be illustrated by examples of existing wireless communication systems and those being developed.

ECTE466 Spread Spectrum Communications 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations 70%; Assignments - 30%.

Subject Description: The aim of this subject is to teach students the theory and highlight the major problems involved in application of spread-spectrum communications. The contents will consist of: basic spread-spectrum techniques, principles of code division multiple access (CDMA), design of spreading sequences, and detection techniques for CDMA. The taught concepts will be illustrated by examples of existing spread-spectrum communication systems.

ECTE467 Mobile Networks 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Assessment: See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.

Subject Description: The aim of this subject is to provide students with the knowledge to evaluate current and emerging mobile networks. Topics covered will include: analogue and digital mobile networks, roaming in mobile networks, GSM standards and principles, GSM network structure, call hand-

over analysis, mobility in the Internet, emerging third generation mobile networks.

ECTE468 Error Control Coding 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC301 or 363 or ECTE301 or 363

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The subject includes general concepts of information transmission and covers error-correction techniques applied to data transmission over error-prone (noisy) channels. Topics covered are forward error correction schemes like linear codes, cyclic codes, block codes (e.g. BCH and Reed-Solomon codes), and convolutional codes, as well as error control for channels with feedback, e.g. automatic repeat request (ARQ) coding.

ECTE471 Robotics Manipulators 3cp

Spring Wollongong On Campus

Contact Hours: 24 hours – weeks 1-7.

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Exclusions: ELEC473

Assessment: See Subject Information Sheet those presented here are only a guide. Written examinations 70%; Assignments 30%.

Subject Description: The subject provides the knowledge and skills required to model, analyse, design and employ a robotics manipulator. The contents will consist of: Industrial robots as a component of automation, mathematical modelling of a robotics arm, direct and inverse kinematics model, direct and inverse dynamics model, trajectory planning, robot control.

ECTE472 Robotics Sensory Control 3cp

Spring Wollongong On Campus

Contact Hours: 24 hours – weeks 8-13

Pre-requisites: Year 2 subjects or equivalent, ELEC344 or 343 or ECTE344

Co-requisites: ELEC313 or ELEC311 or ECTE313

Exclusions: ELEC473

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject provides the knowledge and skills required to design appropriate sensors for the intelligent operation of robotics systems. Topics covered include: intelligent operation of robots, industrial vision, hand-eye control of a robot, tactile sensors, force sensors, ultrasound sensors, and other sensors.

ECTE481 Internet Protocols 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject will provide students with an understanding of protocols used in the computer networks.

Examples will be drawn from existing networks including the Internet. Students will learn what computer network protocols are and how they work today, and how they are likely to evolve in the future. Topics to be studied will include: LAN medium access control protocols, congestion/flow/error control, routing, addressing, and internetworking. There will be both written and programming assignments, including a project involving the design and implementation of an exemplar protocol.

ECTE482 Internet Engineering 3cp

Spring Wollongong On Campus

Contact Hours: 3 hours weeks 8-13

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: This subject will provide students with an understanding of the design and operation of computer networks, with emphasis on the Internet. Students will learn what networks are and how they work today, and how they are likely to evolve in the future. Topics to be studied will include: design and operation of the Internet (including IPv4, OSPF, BGP, Mobile IP, CIDR, mobile IP, IPv6, TCP, and UDP), the role of ATM in the Internet (including the use of MPOA and MPLS), and mechanisms for engineering networks to provide QoS (such as RSVP, RTP, ATM service classes, and IETF DiffServ). There will be both written and programming assignments.

ECTE483 Computer Networking 3cp

Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent

Exclusions: ELEC364

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to provide students with an understanding of the techniques that are used to provide communication between computer systems. Topics covered will include: modems, addressing, routing, interworking and congestion control in computer networks.

ECTE484 Network Design and Analysis 3cp

Contact Hours: Not on offer in 2004

Pre-requisites: Year 2 subjects or equivalent, ELEC364 or ECTE364 or ECTE485/483 or ELEC362 or ELEC469

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to provide students with the engineering skills to analyse multi-service packet switched networks and systems. Topics covered will include: simulation and numerical techniques in queueing, software tools for analysis of queueing systems and networks, queueing performance analysis of Internet, ATM and mobile multi-service networks.

ECTE485 Internet Communications 3cp

Spring Wollongong On Campus

Contact Hours: 3 hours weeks 1-7

Pre-requisites: Year 2 subjects or equivalent

Exclusions: ELEC364, ECTE364

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aim of this subject is to provide students with an understanding of the techniques that are used to provide communication between computer systems. Topics covered will include: layered protocol architectures, circuit and packet switching, asynchronous and synchronous transmission, coding, error detection and correction and flow control.

ECTE486 Telecommunications Network Management 3cp

Spring Wollongong On Campus

Contact Hours: 3 hours weeks 1-7

Pre-requisites: Year 2 subjects or equivalent, ELEC363 or 361 or ECTE363

Exclusions: ELEC468

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%.

Subject Description: The aims of this subject are to provide students with an understanding of the technical issues of telecommunications management and to provide practical hands-on experience of network configuration and management systems. Topics covered will include: private and public communications systems; LANs and SNMP; general management issues; and international standards.

ECTE491 Computer Architectures 6cp

Autumn Wollongong On Campus

Contact Hours: 48 hours

Pre-requisites: ELEC333 or 332 or ECTE333

Exclusions: ELEC431/432 ECTE431/432

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%

Subject Description: The aim of this subject is to extend the digital hardware knowledge gained in ECTE333 Digital Hardware 2. Topics covered will include: CPU organisation; complex instruction sets; reduced instruction sets; I/O structures; interrupts; direct memory access; intelligent peripherals; interfacing to real world signals; use of A/D and D/A converters; real-time operating systems; multi-tasking, multi-threading; multi-processors; parallel DSP architectures; clocks and timers; and direct digital control. The practical component will consist of writing real-time programs on DSP and micro-controller computer systems.

ECTE492 Intelligent and Optimal Control 6cp

Not on offer in 2004

Pre-requisites: ELEC343 or 344 or MECH365 or ECTE344

Exclusions: ELEC441/444, ECTE441/444

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examinations - 70%; Assignments - 30%

Subject Description: The subject provides the knowledge and skills required to analyse and design a system using intelligent

methods and optimise its performance. The contents will consist of: introduction to fuzzy systems and artificial neural networks; crisp fuzzy, adaptive fuzzy and neuro-fuzzy control systems; system identification using the least square method and quadratic performance index; quadratic optimal control; Kalman filters; and applications of genetic algorithms in system identification and optimal control.

ECTE494 Robotics

6cp

Spring Wollongong On Campus

Contact Hours: 48 hours

Pre-requisites: ELEC332, 343 or 333, 344 or MECH226 or ECTE333, 344

Exclusions: ELEC473, ECTE471/472

Assessment: See Subject Information Sheet those presented here are only a guide. Written Examination - 70%; Assignments - 30%

Subject Description: The aim of ECTE494 is to provide students with an opportunity to study the basic principles and concepts of robotics and its application in modern manufacturing systems. Topics covered will include: survey of industrial robot types; strengths and weaknesses of actual robots; the robot as a component of automation; automation and labour relations; vision, tactile and other sensors; design criteria for robots; and the kinematics and dynamics of manipulator arms.

IACT201 Information Technology and Citizens' Rights

6cp

Autumn Wollongong On Campus

Autumn Shoalhaven On Campus

Autumn Batemans Bay On Campus

Autumn Bega/ Moss Vale On Campus

Contact Hours: 3 hours per week

Pre-requisites: 24cp @100 level

Assessment: To be advised - refer Subject Outline.

Subject Description: IACT201 will examine the information technology industry which encompasses: telecommunications; computing; broadcasting and publishing. It will analyse the encroachment of industry activities that use electronic media on: citizens' rights in matters of data surveillance; freedom of access to information and ownership of intellectual property. The extent to which technical solutions to these problems can and cannot be provided will be discussed and alternative non-technical (eg administrative or regulatory) solutions will also be treated. An investigation of the current legal safeguards, their legislative histories and the need for new legislation will be covered.

IACT202 The Structure and Organisation of Telecommunications

6cp

Spring Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega/ Moss Vale On Campus

Contact Hours: 3 hours per week

Pre-requisites: IACT101 OR CSCI102 or CSCI111

Assessment: Class participation - 20%; Weekly Tutorial Report - 20%; Seminar Presentation - 10%; Examination - 50%.

Subject Description: The aim of the subject is to provide students with an introduction to the technologies and regulatory

structures which constitute the modern telecommunications system. Under regulatory components, the variety of telecommunications services and related regulatory concepts and structures are discussed. Under technological components, the following issues are dealt with: telecommunications standards; new network services; and basic components of the telecommunications system such as the public switched network, the radio frequency spectrum, mobile telephony and satellites.

IACT301 Information and Communication Security Issues

6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: IACT201

Assessment: Assignment 1- 10%; Seminar presentation + seminar - 40% Exam - 50%

Subject Description: This subject will examine current controls, both legislative and technical, aimed at maintaining data integrity, ease of access to information, and protection of ownership, in the light of on going developments in computer security, multimedia communications, international electronic networks, and electronic publishing. The subject will cover communication security; issues relating to the monitoring of international agreements; OECD guidelines for security of information; maintaining privacy provisions; password security; and future IT developments and their implications for monitoring intellectual property rights and communication security.

IACT302 Corporate Network Planning

6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours Lecture / Tutorial, 2 hours labs per week.

Pre-requisites: IACT202 or ELEC211 or ELEC212 or ECTE211 or ECTE212

Assessment: made up of Strategic network plan; Seminar presentation; Tutorial Paper and Final Examination.

Subject Description: This subject explores telecommunications network planning from a strategic perspective. Topics covered will include: (1) Fundamental Networking Concepts: standards, protocols, architectures and technologies (2) Fundamental Data Networking Concepts: network topologies, network devices, wireless networking, security and applications (3) Fundamental Voice Networking Concepts: history, network classifications, the telephone system and voice communications, architectures, cellular networks (4) Convergence Of Voice And Data In Telecommunications: frame/cell relay, broadband networks, emerging technologies.

IACT303 World Wide Networking

6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: IACT101 or CSCI102 or CSCI213 or BUSS110 or CSCI111

Assessment: Examination - 40%; Participation - 20%; Proposal for Web - 5%; Group Seminar & Paper - 15%; Web Pages - 20%.

Subject Description: This subject investigates the issues listed in the schedule below within the context of world wide networking. Emphasis will be placed on group work with students required to participate in problem solving communications tasks. Web based activities will be an essential

element in the conduct of this subject. Other activities may include: the setting up and conduct of a video-conference with students at another University, the running of a bulletin board or Internet mailing list or the maintenance of a World Wide Web site. Contributions to this subject have been made by several members of staff within the School.

IACT304 eBusiness Fundamentals 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 12 cp at 200 level in IACT or CSCI

Exclusions: IACT305 or CSCI370

Assessment: Essay - 15%; Seminar Presentation - 10%; Tutorial Participation - 10%; Essay - 25%; Examination - 40%.

Subject Description: This subject aims to provide students with an understanding of eBusiness fundamentals. Today most businesses compete in a global environment and a sound strategy for online business is essential to facilitate this. This subject covers key areas of eBusiness, including: business-to-consumer, business-to-business and business-to-government electronic commerce (EC); online business models and electronic payment systems (EPS) and EC technology basics. Standards, regulation and policy, security and social and economic issues will also be considered in the contexts of business Intranets, Extranets and the Internet. The subject also provides an introduction to the 'Patterns for eBusiness' approach to eBusiness analysis and design.

IACT305 eBusiness Technologies 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 12 cp at 200 level of IACT or CSCI

Exclusions: IACT304 or CSCI370 or ITCS938

Assessment: Mid Session Test - 10% Assignment - 30% Exam - 60%

Subject Description: The subject explores the technology being adopted by organisations and the various means of maximising business potential using Internet technology, including eBusiness (B2B, B2C, B2G etc.). The focus of the course is from the IT professional perspective, giving the student a feel for what is required in a commercial business environment. The technology aspects will cover both developing in house software, as well as selecting 'best practice' outsourced options. Comparisons are drawn between the two adoption methods, and the student is engaged by scenario role playing as part of the group assignments.

IACT401 IT Strategic Planning 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Exclusions: IACT901

Assessment: Tutorial Readings - Report - 10%; Tutorial Participation - 10%; Essay (2000 words) - 20%; Critique IT Strategic Plan - 40%; Seminar - 20%.

Subject Description: The subject is essentially about the application of technology for competitive advantage. Throughout the subject, the spotlight will be trained on techniques and frameworks for "thinking strategically about a company's technological orientation". A wide spectrum of business and technology issues will be covered that address

the problems and issues surrounding the analysis and development of an IT strategic plan.

IACT402 Applied Project Management 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours Lectures per week

Pre-requisites: 24cp @ 300 level

Assessment: Assessment - 40% Examination - 60%

Subject Description: IACT402 deals with the efficient management of a medium size project to ensure that a project meets deadlines and is within its budget. It covers the process of planning, directing and controlling the development of an IT project. Topics covered will include project management tools, software and techniques; expectations management matrices; and use of people management (the subtle art of delegation and accountability). Students will test the principles on the plan, design and implementation of a medium size project.

IACT403 Human Computer Interface 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Exclusions: CSCI324

Assessment: Final Exam - 40%; Assessment - 60%

Subject Description: IACT403 examines the design evaluation and implementation of interactive computing systems for human use (HCI) and the major phenomena surrounding them. Also considered are joint performance of tasks by humans and machines, structure of human machine communication, social and organizational interactions with machine design, human capabilities to use machines including their learnability as well as algorithms and programming of the interface itself, engineering concerns that arise in designing interfaces, the process of specification design and implementation of interfaces and design tradeoffs.

IACT404 International Telecommunications Policy Issues 6cp

Not on offer in 2004

Pre-requisites: 24cp @ 300 level

Subject Description: IACT 404 provides students with an understanding of the policy issues relating to the emergence of political, economic and technological change in international telecommunications. The interdisciplinary foundations of telecommunications policy are examined. Issues in the development of telecommunications policy in Australia and overseas are reviewed as well as the regulatory frameworks adopted by different countries (eg. Australia and the United States) and regions (eg. European Union and South East Asia).

IACT405 Information Technology and Innovation 6cp

Autumn Wollongong On Campus

Pre-requisites: 24cp @ 300 level

Assessment: Examination - 40%; Tutorial/seminar assignments - 40%; Essay - 20%

Subject Description: The rapid development of information technology networks has prompted governments to develop national policies to promote the growth of services in these areas. Innovation in information technology and its effective use

is now seen to underpin international competitiveness. Successful innovation policies are now central to the future viability of industry and nations alike. This subject addresses key themes such as: the importance of innovation to the economy and the firm; the links between information, information technology and innovation; and, the development of effective national policies to promote industrial innovation. Issues such as the role of multinationals, transborder data flows and research and development are discussed in this context.

IACT406 Strategic eBusiness Solutions 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: IACT304 or CSCI370

Exclusions: ITCS436 or ITCS450

Assessment: Project - Part A 20%; Project- Part B 30%; Seminar Presentation 10%; Tutorial Participation 10%; Examination 30%

Subject Description: This subject aims to provide students with an understanding of how to design integrated solutions for eBusiness using a pattern-oriented approach. Enterprises, both large and small, as well as government institutions, are increasingly becoming reliant upon eBusiness infrastructure. Knowing the strategic business and technology principles and practices related to the design process is becoming increasingly important for a given organisation. This subject will cover business scenarios including electronic data interchange (EDI), supply chain management (SCM), enterprise application integration (EAI), customer relationship management (CRM), sales force automation (SFA); and knowledge management systems (KM).

IACT416 Organisational Issues in Information Technology 6cp

Not on offer in 2004

Pre-requisites: 24cp @ 300 level

Assessment: Seminar presentation - 15%; Seminar paper - 15%; Essays - 70%.

Subject Description: IACT416 aims to provide the student with an understanding of issues related to the combination of management, workers and information technology. Students will gain an appreciation of the complexity of the issues involved in decision making when people and technology are concerned. Students will also develop an understanding across commerce and industry of the parallels that exist in the development, implementation and application of information and communication technology. Effect on organisational information flows of growth in size and complexity: the management and technological response. Information technology as a catalyst in codifying work procedures and creating new organisational structures. Hierarchical versus horizontal approaches to information management. Management theory and IT. Industrial use of IT and parallels with office sector usage. Implications of broadband networks for traffic integration and subsequent application in commerce and industry.

IACT417 Information Management 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 24 cp @ 300 level

Assessment: Group Project Proposal - 10%; Group Seminar 15%; Participation - 10%; Examination - 40%; Group Report/Project - 25%

Subject Description: This subject focuses on the importance of information as a resource, on which the knowledge base of successful organisations is dependent. While the main focus of the subject is information management within the organisation, a broader context is important. National and international issues relating to information access will be addressed. These include: standards relating to electronic storage and retrieval of electronic documents (digital archiving); legal protection for information as an economic good (for example as patents, copyright and other forms of intellectual property); and social and ethical issues (eg privacy and security) relating to information management

IACT418 Corporate Network Management 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Assessment: Major Project - 40%; Seminar Presentation - 10%; Tutorial Paper - 10%; Final Examination - 40%

Subject Description: The subject investigates the documentation and management of telecommunications networks. Topics to be covered include 1. Documenting the Network: requirements capture and specification, functional specification, design specification, documenting the network configuration 2. Managing the Network: influences on the network, management architectures and standards, performance management, fault management, disaster management, managing changes in a network, cost minimisation management and 3. Corporate and Regulatory Requirements: management teams, operations and support, standards and protocols.

IACT419 Online Information Services 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Assessment: Practical Work - 20%; Essays - 30%; Project or Report - 30%; Seminar and Seminar Paper - 20%.

Subject Description: This subject examines the emergence of electronic information supermarkets and the changes in ownership that have taken place within the online information industry as mass media conglomerates have entered the field. Other aspects covered include: the role of government in the development of online databases and networks; the creation of "value-added" products through re-formatting, marketing and electronic delivery of information; the future of public information sources such as libraries and government data collection and publication agencies in a changing online environment; and the potential of network developments such as AARNet, the Internet, and NREN in the delivery of online information resources. Some practical experience in the use of electronic information services is provided including Australian and international databases and computer networks.

IACT422 Case Studies in Information Technology Applications 6cp

Spring Wollongong On Campus

Pre-requisites: 24cp @ 300 level

Subject Description: IACT422 examines leading edge technological developments and the issues arising from the innovative uses of such technology. This subject covers innovative and new applications of information technology to create services and systems, eg electronic banking, video

conferencing, multimedia, EDI and CD-ROM. In order to provide a thorough background and understanding of an application, normally only one case will be studied in the subject in any one semester. Cases that may be covered include, multimedia, EDI and EFTPOS.

IACT424 Corporate Network Design and Implementation 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 24cp @ 300 level

Assessment: Major project - 40% Seminar presentation - 10% Tutorial Paper - 10%; - Final Examination - 40%

Subject Description: The subject investigates the design and implementation of a telecommunications network plan. Topics to be covered include (1) The Need for Planning and the Planning Process: planning teams, strategic planning, the network plan, security planning and implementation planning. (2) The Design Process: design teams, translating the plan into design criteria, requirements capture and specification, design requirements and criteria, choosing topographies and architectures, evaluating plans (3) The Implementation Process: implementation teams, validating implementation plans, managing people and technology, managing the implementation process.

IACT426 Information Society, Knowledge Work and Information Technology 6cp

Not on offer in 2004

Pre-requisites: 24cp @ 300 level

Assessment: Examination - 30%; Seminar presentation - 10%; Seminar paper - 10%; Essay - 25%; Project - 25%

Subject Description: The subject examines the concept of 'information society' and its measurement. It also examines the changing structure of the workforce with an investigation of the place and role of knowledge workers in the labour force being a core element. An examination of the trends affecting knowledge workers in Australia, and internationally, with respect to increasing credentialism, life-long learning and issues relating to their education and training will be undertaken. The introduction and application of IT affects each of these areas is therefore another critical component of study.

IACT430 Special Topics in Information and Communication Technology 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week.

Pre-requisites: 24 @300 level

Subject Description: This is an elective subject usually undertaken in the Honours year of the BInfoTech degree, and is also available to students from other disciplines. IACT430 aims to provide the student with an understanding of topics at the forefront of the discipline. Topics will be selected from areas of interest of staff members or visiting staff members to the School. These will include topics in the application of information and communication technology.

IACT433 Special Topics in Telecommunications Issues 6cp

Not on offer in 2004

Pre-requisites: 24cp @ 300 level

Subject Description: Topics will be selected from areas of interest of staff members or visiting staff members to the School in the area of telecommunications. IT is a rapidly changing area. This subject will allow investigation into topics at the forefront of the discipline.

IACT441 IT Research Methodology 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: WAM of 67.5 & approval from Head of School

Assessment: Annotated bibliography, Research proposal, Methodology - 40%; Exam - 40%; Workshop participation - 20%

Subject Description: IACT441 will cover the following topics on IT research methodology: What is Research (Purpose of thesis components); Research Methods; Literature Review - Critical Reading, Annotated bibliography and note taking; Survey Methods; Quantitative Methodologies (Results etc); Literature Review - Structure, Writing Up and Presentation Skills Satisfactory attendance at workshops is a requirement for the successful completion of this subject as is attendance at the Postgraduate Forum, held usually during week 8 of Autumn Session

IACT450 Research Report 18cp

Spring Wollongong On Campus

Pre-requisites: a grade of 75% or better in IACT441

Exclusions: IACT440

Subject Description: This is an Honours year subject of the BInfoTech degree, only available to students enrolled for honours from year 2000 onwards. It is a research project conducted under the supervision of academic staff in the school.

IACT451 IT Project 12cp

Not on offer in 2004

Prerequisites: IACT301 and IACT302 plus at least 12 credit points of 300 level subjects

Assessment: Problem definition and Project Plan (20%) Group Presentation/Seminar (10%) Project diaries (20%) Final report (50%)

Subject Description: This subject is a group project, conducted under the supervision of an academic staff member(s). Staff members will propose real-world IT projects ranging from the selection and implementation of IT to the development and implementation of software systems. Involves: project planning, group coordination, seminars and individual presentations, research of proposed application domain, preparation of reports and, depending on the project, various system development methodologies. Students will form teams, each of which will design, implement and document a solution to one of the proposed projects. Teams will meet weekly with supervisors to discuss progress and problems.

INFO202 Project 6cp

Annual	Wollongong	On Campus
Spring	Dubai	On Campus

(Feb-May 04)**Contact Hours:** 2 hours Lecture/Tutorial per week for half each session**Pre-requisites:** CSCI111 and ECTE195**Co-requisites:** CSCI213 and ECTE291 or ECTE283**Exclusions:** ECTE250

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Reports (one per team per session) - 30%; Presentations (two per session) - 20%; Project Deliverables (two per session) - 20%.

Subject Description: This subject is a multi-disciplinary group project in which students will form groups to design and implement a project which is related to internet science and technology. The project will be supervised by staff from the Faculty of Informatics.

INFO303 Advanced Project 12cp

Annual	Wollongong	On Campus
Autumn / Spring	Dubai	On Campus

(Sept 03-June 04)**Pre-requisites:** INFO202, and WAM > 70 in level 200 subjects

Assessment: See Subject Information Sheet those presented here are only a guide. Examination (Lecture Material) - 30%; Reports (one per team per session) - 30%; Presentations (two per session) - 20%; Project Deliverables (two per session) - 20%.

Subject Description: This subject provides an opportunity for more capable students to do a group multi-disciplinary project in an area related to internet science and technology. It will allow students to learn how to communicate with one another in teamwork, in collaboratively executive a large internet related project.

INFO401 Mathematics and Finance Honours Project 12cp

Annual	Wollongong	On Campus
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Contact Hours: 2 hours per week**Pre-requisites:** WAM greater than or equal to 67.5 after completing 144 cp of the course.**Assessment:** Examination of written work, and a seminar.

Subject Description: This is a project conducted under the supervision of one or more relevant members of academic staff. The topic of the work is determined jointly by the student and supervisor.

INFO402 Mathematics and Economics Honours Project 12cp

Annual	Wollongong	On Campus
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Contact Hours: 2 hours week per week.**Pre-requisites:** WAM greater than or equal to 67.5 after completing 144 cp of the course.**Assessment:** Examination of written work, and a seminar.

Subject Description: This is a project conducted under the supervision of one or more relevant members of academic staff. The topic of the work is determined jointly by the student and supervisor.

INFO403 Computer Bioinformatics Honours Project 24cp

Annual	Wollongong	On Campus
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Contact Hours: 1 hour per week**Pre-requisites:** WAM greater or equal to 67.5 after completing 144cp of the course**Restrictions:** only available to Computer Bioinformatics candidates**Assessment:** Examination of written work; Seminar presentation

Subject Description: This is a research project conducted under the supervision of one or more relevant members of academic staff. The topic of the work is determined jointly by the student and supervisor.

INFO411 Data Mining and Knowledge Discovery 6cp

Spring	Wollongong	On Campus
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Contact Hours: 2 hours per week**Pre-requisites:** 36 cp (Knowledge of mathematical and statistical notation at an introductory level.)**Assessment:** Projects and Assignments - 40%; Exam - 60%

Subject Description: Introduction to Data Mining and Knowledge Discovery, Data Bases and Warehouses, Data Structures, Exploratory Data Analysis Techniques, Association Rules, Artificial Neural Networks, Tree Based Methods, Clustering and Classification Methods, Regression Methods, Overfitting and Inferential Issues, Use of Data Mining packages.

INFO412 Mathematics for Cryptography 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 4 hours per week**Assessment:** Assignments - 15%; Class Tests - 15%, Final Examination - 70%.

Subject Description: Logic: informal propositional logic, circuit theory. Natural Deduction style proofs in propositional & predicate logic. Interpretations & Models. Nonclassical logics. Number Theory: elementary number theory, modular exponentiation, discrete logarithms, Galois arithmetic & polynomials, error correcting codes & cryptography. Elliptic curves, groups for cryptography. Combinatorics: combinatorial probability, Knapsack problem, network and graph theory, combinatorial designs, game theory & linear programming applied to cryptography.

INFO413 Information Theory 6cp

Spring	Wollongong	On Campus
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Contact Hours: 3 hours per week.**Pre-requisites:** MATH121 or MATH122 or (MATH187 and MATH188), or (MATH141 and MATH142).**Assessment:** Assignments - 16%, Test - 20%, Final Examination - 64%

Subject Description: The following is a selection of topics which may vary. The idea of probability, entropy, inequalities involving entropy, data compression, Huffman and Fano codes, information sources, McMillan's theorem, communication and capacity, block codes, Shannon's theorems, applications to other areas which may include communication, linguistics, genetics and financial investment.

ITCS201 Markup Languages 6cp
Autumn Wollongong On Campus
Contact Hours: 1 hr lecture, 2 hrs tutorial/ laboratory per week.
Assessment: Assignments - 70% Final exam - 30%
Subject Description: XML (eXtensible Markup Language) can be regarded as a language for creating other languages. In this capacity XML has rapidly become ubiquitous in very many diverse areas of IT and is now regarded as an essential core area of knowledge for every IT practitioner. The primary aims of this subject are to enable students to acquire practical proficiency in exploiting XML and to be able to explain the relevance of XML for many IT and Business contexts. In addition to being a new area of study, by studying XML students can extend or re-inforce their understanding of related study areas, e.g., the students can develop their understanding of data modelling and object-orientation (via XML schemas and XML transformations). As a secondary aim (a minor but relevant part of the subject) the subject will provide a basic practical proficiency in manipulating HTML and hence construction of elementary web pages.

ITCS301 Exploiting Collaborative Technologies 6cp
Not on offer in 2004
Prerequisites: 12 cp at 200 level in IACT or CSCI or ITCS
Assessment: Assignments - 70% Final exam - 30%
Subject Description: Students learn how to practically exploit Collaborative Technologies within eBusiness contexts. The concepts of Collaboration and the details of Collaborative Technologies will be investigated and explained from different eBusiness perspectives including the eBusiness Solutions perspective and the Patterns for eBusiness perspective. Examples of focus will include collaborative tools and techniques to support Knowledge Management and to support eLearning within an eBusiness solutions framework. Collaboration patterns will include modern variants of traditional categories including contextual (asynchronous) collaboration and interactive (synchronous) collaboration. Includes a practical focus ie a laboratory component that explores working with advanced collaborative applications including (for example) QuickPlace, Virtual Classroom, and various extensions to the J2EE (Java 2 Enterprise Edition) platform. The subject will exploit collaborative team approaches to practical assignments.

ITCS429 Concepts and Issues in Healthcare Computing 6cp
Spring Wollongong On Campus
Contact Hours: 1 hour lecture, 2 hour tutorial per week.
Pre-requisites: 24cp @ 300 level
Exclusions: IACT430 or IACT432 or IACT929
Assessment: Assignment 100%
Subject Description: This subject examines the essential concepts of health computing, limitations of technology, issues of privacy and security, economics of healthcare computing, managing healthcare computing projects, evaluation methods in medical informatics, knowledge engineering in health informatics, risk assessment in health informatics and the important issues involved in computer applications in healthcare.

ITCS430 Introduction to Health Informatics 6cp
Autumn Wollongong On Campus
Contact Hours: 1 hour Lecture, 2 hours Tutorial per week.
Pre-requisites: 24cp @ 300 level
Exclusions: IACT430 or IACT432 or ITCS930
Assessment: Assignment 100%
Subject Description: The subject covers clinical decision making and decision support systems and how health informatics and health information systems can assist. Topics include decision-making and decision-support systems in healthcare; the reasons for the necessity of systematically processing data, information and knowledge in medicine and healthcare; benefits and constraints of using information and communication technology; principles of practice evaluation and evidence-based care; evaluation methods; processing and evaluating information including analysis of business processes, bio-statistics and epidemiology; the application of statistics; computer concepts; characteristics of health information systems; healthcare systems; patient management; primary care systems and knowledge management.

ITCS431 Advance Web Application Development 6cp
Spring Wollongong On Campus
Contact Hours: 3 hours per week
Pre-requisites: 24cp @ 300 level
Assessment: Assignments Final exam
Subject Description: This subject is an advanced web applications development subject utilizing the visual basic integrated development environment. Requirements analysis and component solution architectures for e-commerce applications will be studied and solutions implemented utilizing advanced features of VB IDE. See Subject Outline for details

ITCS432 Web Design 6cp
Spring Wollongong On Campus
Contact Hours: 2 hours Lectures, 1 hour Lab
Pre-requisites: 24cp @300 level
Assessment: Assignments 100%
Subject Description: This subject introduces students to the design and programming of multi-tier web sites, where dynamic pages present data from databases. Programming will be done with frameworks, such as Apple Web Objects to create web applications that support dynamic web pages and object models of databases. Topics include the design and creation of user process, site architecture, elegant page layouts and simple site navigation. Pages will be designed and content created with professional web tools, such as Adobe web tools. Emphasis is placed on user process, good media design, clean architecture and efficient algorithms.

ITCS436 Detailed Design of Integrated Solutions for eBusiness 6cp
Spring Wollongong On Campus
Contact Hours: 3 hours per week
Prerequisites: IACT305 & CSCI213 or CSCI399 & CSCI213
Exclusions: ITCS450 or IACT406 or ITCS936
Assessment: Assignment 50%; Exam 50%
Subject Description: This subject develops the students' understanding of the system development process by taking the

student through all the phases of analysis design and construction of an eBusiness solution. The methods adopted provide an in-depth understanding of the logistical problems associated with gathering user requirements, and analysis and design, using the 'Patterns for eBusiness' method.

ITCS450 Patterns for eBusiness 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: 12 cp at 200 level of IACT or CSCI

Exclusions: IACT406 or ITCS436 or CSCI370

Assessment: Assignments - 60%; Exam - 40%.

Subject Description: This subject explores advanced 'pattern-oriented' approaches to the design and development of eBusiness solutions. The 'Patterns for eBusiness' initiative provides a conceptual framework that can be exploited at all stages in the eBusiness software lifecycle.

In particular, this conceptual framework and vocabulary bridges the communications gap between business analysts and systems developers seeking to devise integrated solutions for eBusiness.

ITCS451 Web Services for Dynamic eBusiness 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: IACT305 or CSCI399

Exclusions: ITCS951

Assessment: Assignments - 60%; Exam - 40%.

Subject Description: Web Services are at the core of what is being termed the next generation of eBusiness. The term 'Web Services' refers to the set of standard protocols and associated technologies that enable software applications to communicate with each other across the Internet. To effectively exploit the potential of Web Services requires appropriate effort in the proper design of business processes and service architectures.

MATH110 Advanced Mathematics 1 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 4 hours per week

Assessment: Assignments - 10%; mid-session test - 20 %; Final Examination - 70%.

Subject Description: Several areas of maths: Algebra (involves solving systems of equation using matrix methods, determinants and applications); Vector geometry (involves the idea of vectors and applications to geometry) Polar coordinates; Calculus (involves solution techniques for first and second order differential equations).

MATH111 Applied Mathematical Modelling 1 6cp

Spring Wollongong On Campus

Spring Loftus On Campus

Contact Hours: 6 hours per week

Prerequisites: Either a mark of at least 80 in MATH151 OR (in the NSW HSC Examination) Mathematics Band 4; or Mathematics Ext 1. **Co-requisites:** MATH188 or MATH142

Assessment: Laboratory Reports - 18%; Midsession Exam - 41%, Final examination - 41%.

Subject Description: Emphasises the physical, mathematical, numerical and computational aspects of the modern usage of Applied Mathematics in Science, Engineering and Industry. It is

strongly recommended for the students who are majoring in Industrial and Applied Mathematics. Real-world problems are tackled as idealised mathematical systems, the mathematical problem is solved and the results interpreted

MATH121 Discrete Mathematics 6cp

Autumn Wollongong On Campus

Autumn Loftus On Campus

Contact Hours: 6 hours per week

Prerequisites: Either a mark of at least 80 in MATH151 OR (in the NSW HSC Examination) Mathematics Band 4; or Mathematics Ext 1.

Assessment: Assignments - 20%; Mid-Session Tests - 20%, Final Examination - 60%.

Subject Description: Students will be introduced to the spirit of mathematical inquiry and critical analysis, and encouraged to develop the ability to apply mathematical principles to the formulation and solution of problems. This is done through the use of non-calculus techniques, especially those of logic and number theory. This subject is well suited to computer science students.

MATH122 Probability and Logic 6cp

Spring/ Autumn Dubai On Campus

Autumn Wollongong On Campus

Contact Hours: 4 hours Lectures, 1 hour Tutorial per week

Exclusions: not to count with MATH121 or STAT131.

Assessment: Exam - 70%; Assignments - 30%

Subject Description: MATH122 consists of two sections: 1) Probability and Statistics: counting, modelling variability tree diagrams, conditional probability, discrete and continuous random variables, central limit theorem, statistical literacy. 2) Logic and Set Theory: propositional logic, truth tables, tautology, negation, algebraic laws, deduction, proofs, basic set theory, equivalence relations, functions, partial order, linear order.

MATH141 Mathematics 1C Part 1 6cp

Autumn Wollongong On Campus

Autumn Loftus On Campus

Contact Hours: 6 hours per week

Prerequisites: Either a mark of at least 65 in MATH151 OR in NSW HSC Examination: Mathematics - no minimum mark restriction

Exclusions: MATH101, MATH141 and MATH187 are not to count together.

Assessment: Assignments - 10%; Tests - 30%; Final Examination - 60%.

Subject Description: MATH141 is an alternative core subject for candidates whose HSC mathematics background is weaker than that required for MATH187. The aim of this subject is to develop ideas, concepts and skills in mathematics, especially applied skills, for application in later subjects. Main topics covered are matrix algebra, determinants, vectors, and differential and integral calculus. Computer Aided Learning modules on background material are available .

MATH142 Mathematics 1C Part 2 6cp

Spring Wollongong On Campus

Spring Loftus On Campus

Contact Hours: 6 hours per week

Pre-requisites: Either MATH141 or MATH161 OR a mark in the range 45 to 54 in MATH187

Exclusions: MATH101, MATH162 and MATH188 are not to count together.

Assessment: Assignments - 10%; Tutorial Quizzes - 10%; Mid-Session Test - 20%; Final Examination - 60%.

Subject Description: MATH142 is a core subject continuing on from MATH141. The aim of this subject is to develop ideas, concepts and skills, especially applied skills, in mathematics for application in later subjects. Main topics covered are further calculus, differential equations, numerical mathematics, sequences and series of numbers and complex numbers. Computer Aided Learning modules are available.

Students who do sufficiently well in MATH142 may proceed to relevant 200 level mathematics subjects.

MATH151 General Mathematics 1A 6cp

Autumn Wollongong On Campus

Summer 2004/05 Wollongong On Campus

Contact Hours: 6 hours per week

Prerequisites: NSW HSC Examination: any mathematics- but enrolment is not permitted if the student achieved Mathematics Band 4 or better, or completed Mathematics Ext 1 or Ext 2.

Exclusions: Not to count with any one of MATH101, MATH141, MATH142, MATH187, or MATH188 unless satisfactorily completed prior to satisfactory completion of any of MATH101, MATH141, MATH142, MATH187, or MATH188 respectively.

Assessment: Tests - 30%; Final Examination - 70%.

Subject Description: MATH151 is intended for candidates registered for courses in the Faculty of Science who do not meet the pre-requisite for the subject MATH187. It introduces topics in algebra, trigonometry, co-ordinate geometry, vectors, functions, and calculus. The material is presented in a self-contained manner with a view to further applications in Science subjects.

MATH161 Mathematics 1E Part 1 6cp

Spring Wollongong Flexible

Prerequisites: Either a mark of at least 65 in MATH151 OR in NSW HSC Examination: Mathematics - no minimum mark restriction

Exclusions: Not to count with MATH101, MATH141, MATH143, MATH144, MATH187.

Assessment: Assignments 10%; In-Session Tests - 30%; Final Examination - 60%.

Subject Description: The content of MATH161 involves several areas of Mathematics. These areas are: Calculus which includes real functions, and an introduction to differentiation and integration; Polar co-ordinates; Algebra, which includes solving systems of equations using matrix methods, determinants and applications; and Vector Geometry, which involves vectors and their applications to geometry.

MATH162 Mathematics 1E Part 2 6cp

Summer 2004/05 Wollongong Flexible

Pre-requisites: Either MATH161 or MATH141 or MATH187

Exclusions: Not to count with MATH101, MATH142, MATH143, MATH144, MATH188.

Assessment: Assignments - 10%; Tests - 30%; Final Examination - 60%.

Subject Description: The content of MATH162 involves several areas of Mathematics. These areas are: Calculus, which includes further integration, applications of integration, and first and second order differential equations; Complex Numbers; Further Calculus, which includes an elementary introduction to sequences and series and their convergence.

MATH187 Mathematics 1A Part 1 6cp

Autumn Wollongong On Campus

Autumn Loftus On Campus

Contact Hours: 6 hours per week

Prerequisites: Either a mark of at least 80 in MATH151 OR (in the NSW HSC Examination) Mathematics Band 4; or Mathematics Ext 1.

Exclusions: MATH101, MATH141 and MATH187 are not to count together.

Assessment: Assignments - 10%; Test - 20%; Final Examination - 70%.

Subject Description: The pair of subjects MATH187 and MATH188 make up the core for 100 level subjects. They are needed for most 200 level subjects in Mathematics and Applied Statistics. Students not wishing to proceed to 200 level mathematics may just study MATH187. MATH187 is available to students in all disciplines. This subject aims to develop ideas, concepts and skills in mathematics for application in subjects that require MATH187 as a co- or pre-requisite. Main topics are matrix algebra, determinants, vectors, and differential and integral calculus. Assistance is available for students with a weak background in mathematics.

MATH188 Mathematics 1A Part 2 6cp

Spring Wollongong On Campus

Spring Loftus On Campus

Contact Hours: 6 hours per week

Pre-requisites: Either MATH187 OR a mark of at least 65 in MATH141

Exclusions: MATH101, MATH142 and MATH188 are not to count together.

Assessment: Assignments - 10%; Test - 20%; Final Examination - 70%.

Subject Description: MATH188 is a core subject continuing on from MATH187. The aim of this subject is to develop ideas, concepts and skills in mathematics for application in later subjects. Main topics covered are further calculus, differential equations, sequences and series of numbers, numerical mathematics and complex numbers. This subject is required for most 200 level Mathematics and Applied Statistics subjects.

MATH201 Multivariate and Vector Calculus 6cp

Autumn Wollongong On Campus

Autumn Loftus On Campus

Contact Hours: 4 hours per week

Prerequisites: One of MATH101 or MATH188 or MATH283 or (a mark of at least 65 in MATH142 or MATH162) or enrolment in course code 762A.

Assessment: Assignments - 6%; Mid-Session Test - 34%, Final Examination - 60%; Lab Assignments Compulsory.

Subject Description: MATH201 is one of four core 200 level Mathematics subjects and is a prerequisite for many 300 level

subjects in Mathematics and Statistics. This subject extends the calculus of one variable to the calculus of more than one variable. Applications are given to maxima and minima, multiple integrals, vector calculus, line, surface and volume integrals, and to geometrical problems.

MATH202 Differential Equations 2 6cp

Spring Wollongong On Campus

Spring Loftus On Campus

Contact Hours: 4 hours per week

Prerequisites: One of MATH101 or MATH188 or (a mark of at least 65 in MATH142 or MATH162) or enrolment in course code 762A.

Co-requisites: MATH201

Assessment: Assignments - 22%; Mid-Session Test - 13%; Final Examination - 65%.

Subject Description: MATH202 is one of four core 200 level Mathematics subjects. This subject introduces the student to various special functions and differential equations and to techniques (both analytic and numerical) for their solution. Topics covered include exact first order equations, Gamma, Beta and Error functions, Laplace transforms, Fourier series, separation of variables for pde s, basic numerical techniques, computer packages, and comparative accuracy of numerical techniques.

MATH203 Linear Algebra 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week

Prerequisites: One of MATH101 or MATH188 or MATH283 or (a mark of at least 65 in MATH142 or MATH162) or enrolment in course code 762A.

Assessment: Assignments - 27%; Final examination - 70%; Tutorial/Lab Participation - 3%.

Subject Description: MATH203 is one of four core 200 level Mathematics subjects. The study of systems of linear equations is important not only to mathematicians but also to scientists and engineers. Study of these systems is done both theoretically and numerically with geometrical interpretations given. It aims to build on students' knowledge of matrix algebra and vector analysis.

MATH204 Complex Variables and Group Theory 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week

Prerequisites: One of MATH101 or MATH188 or (a mark of at least 65 in MATH142 or MATH162) or enrolment in course code 762A.

Co-requisites: MATH201

Assessment: Assignments - 10%; Mid-Session Test - 20%; Final Examination - 70%.

Subject Description: MATH204 is one of four core 200 level Mathematics subjects. It is of substantial value to science and other students. The study of Complex Variables extends the calculus of functions of a real variable to functions of a complex variable. Group Theory studies basic algebraic properties common to many mathematical systems and is currently applied in the areas of physics, geology and computer science.

MATH212 Applied Mathematical Modelling 2 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week

Prerequisites: One of MATH101 or MATH188 or MATH283 or (a mark of at least 65 in MATH142 or MATH162) or enrolment in course code 762A.

Assessment: Mid-session Test - 30%; Final examination - 70%.

Subject Description: MATH212 is a subject in the applied mathematics strand. The subject provides insight into the process of Applied Mathematical Modelling in two important areas, heat transfer and Newtonian mechanics, though the modelling skills will be transferable to other areas. The main mathematical technique used is that of solving ordinary differential equations.

MATH222 Continuous and Finite Mathematics 6cp

Autumn Wollongong On Campus

Prerequisites: One of MATH101 or MATH188 or (a mark of at least 65 in MATH142 or MATH162) or enrolment in course code 762A.

Co-requisites: MATH201

Assessment: Assignments - 24%; Class Participation - 6%; Final examination - 70%.

Subject Description: MATH222 is for students who wish to continue in the mathematical analysis strand. Continuous Mathematics is concerned with the continuation of concepts introduced in first year calculus, including those of convergent sequence, continuous function and the integral of a function. Finite Mathematics is strictly independent of earlier work, but is related to first year algebra.

MATH235 Mathematics Project A 6cp

Autumn / Spring Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: 24 credit points at 100 level including MATH110

Restrictions: This subject is only for students enrolled in the BMath(Advanced) degree

Assessment: Projects - 60%; Test - 10%, Final Exam - 30%

Subject Description: The subject is a project individually chosen for the student, at a level appropriate to the 200 classification. The content may consist of (1) a placement in business or industry where substantial use is made of mathematical techniques; or (2) a project directed towards independent investigation by the student, written and/or oral presentations, and substantial interaction of the student with the supervisors of the project and other members of staff; or (3) a project directed to mastery of a mathematical package or language, with specific use of the package or language in some application or area of mathematics; or (4) a project of research collaboration with a member or members of staff, of which written and spoken presentation would be a part. Other projects which are appropriate but not primarily in one of these single categories may occur, such as a project combining features of (1) and (2).

MATH253 Linear Algebra 4cp

Autumn Wollongong On campus

Contact Hours: 4 hours per week

Pre-requisites: MATH188 a mark of at least 65 in MATH142.

Exclusions: MATH203

Assessment: Assignments - 27%; Final Examination - 70%; Tutorial/Lab Participation - 3%.

Subject Description: MATH253 is 2/3 of the subject MATH203. The aim of MATH253 is to build on students' knowledge of matrix algebra and vector analysis, and provide a strong foundation in the mathematics of linear algebra, with an appreciation of the applications that motivate it. The study of systems of linear equations is important not only to mathematicians but also to scientists and engineers. MATH253 will include study of these systems with geometrical interpretations being given. It includes vector spaces, subspaces, linear dependence, basis, dimension and inner product spaces. This will be followed by eigenvalues and eigenvectors and their central role to the diagonalization of matrices. Linear transformations and their basic properties will be discussed.

MATH283 Mathematics IIE for Engineers Part 1 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: One of MATH101 or MATH142 or MATH144 or MATH162 or MATH188

Exclusions: Not to count with MATH202 or MATH261 or MATH281.

Assessment: Assignments - 20%; Mid-Session Test - 10%, Final Examination - 70%.

Subject Description: MATH283 is a subject for Bachelor of Engineering students. The subject consists of two topics, Differential Equations and Statistics. Each topic is worth 50% of the final mark. Differential Equations deals with new techniques, including the Laplace transform, Fourier series, and special functions (the gamma, beta and error functions). Statistics gives an introduction to statistical computing, and to basic statistical techniques, including mathematical models for describing variation in experimental situations.

MATH291 Differential Equations 3cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: MATH101 or MATH188 or a mark of at least 65 in MATH142.

Co-requisites: MATH201

Exclusions: Not to count with MATH202.

Assessment: As for MATH202. (Assignment 10%, test 20%, final exam 70%)

Subject Description: Linear second and higher order differential equations, solution of differential equations by Laplace transform methods. Fourier series, and some special functions (gamma, beta and error functions) will be introduced, together with an introductory solution method to boundary value problems (separation of variables).

MATH292 Numerical Analysis 3cp

Spring Wollongong On Campus

Pre-requisites: MATH101 or MATH188 or a mark of at least 65 in MATH142.

Co-requisites: MATH201

Assessment: As for MATH202. (Assignments - 20%, Test - 10%, Final Exam - 70%).

Subject Description: Basic numerical techniques for the solutions of differential equations, with application of computer packages, will also be covered. Students will also be expected to assess the comparative accuracy of these techniques.

MATH293 Complex Variables 4cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: One of MATH101 or MATH188 or a mark of at least 65 in MATH142.

Exclusions: Not to count MATH204.

Assessment: Assignment - 10%, Mid-Session Test - 20%, Final Examination - 70%

Subject Description: Complex functions, power series, analytic functions, Laurent series, singularities, residues, contour integration, Cauchy's theorem, Residue theorem and applications, conformal transformations.

MATH294 Group Theory 2cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: One of MATH101 or MATH188 or a mark of at least 65 in MATH142.

Exclusions: MATH204

Assessment: Assignments - 10%; Mid-Session Test - 20%; Final Examination 70%.

Subject Description: Group Theory consists of a careful study of the fundamental properties of groups using the following concepts: order, finite groups, subgroups, cosets, group homomorphisms and group isomorphisms. This study leads to an important result in Group Theory called Lagrange's theorem.

MATH302 Differential Equations 3 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: MATH283 or MATH202

Assessment: Assignments 10%, Mid-session test 20%, Final Examination 70%.

Subject Description: Many physical problems in the world are modelled with differential equations. This subject extends the knowledge of the student to various types of equations and to their solution. Techniques used widely in many areas of physical science are developed in this subject. Topics include Laplace and Fourier transforms, series solutions, and Hypergeometric and Bessel functions.

MATH305 Partial Differential Equations 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: MATH201, 202 and 203

Assessment: Laboratory - 10%; Assignments - 5%; Final Examination - 85%.

Subject Description: MATH305 is in a central area of mathematics, as many physical problems in the world are modelled with partial differential equations. Various types of equations and their solutions are discussed. As many equations cannot be solved in analytical form, numerical methods of solution also are considered. The aim is to develop high level mathematical ability and problem solving skills.

MATH312 Applied Mathematical Modelling 3 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** MATH202 or (MATH283 and ENGG252)**Assessment:** Assignments - 10%; Mid-Session Test - 20%, Final Examination - 70%.

Subject Description: MATH312 builds on work and knowledge originating in MATH111 and MATH212 and shows how to undertake mathematical modelling of many scientific and engineering processes and problems arising in industry. Main foci are: continuum mechanics, including deformation of materials; linear elasticity, including basic concepts of the stress-strain relation; and fluid mechanics.

MATH313 Industrial Mathematical Modelling 6cp**Spring** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** MATH202 or (MATH283 and MECH343)**Assessment:** Case study project - 30%; Tutorial participation - 10%; Final examination - 60%.

Subject Description: MATH313 is designed to develop mathematical modelling skills by the examination of case studies relevant to industry. The basic equations are derived from first principles and used to study the transfer of mass and heat, diffusion, solidification and combustion.

In addition, the subject aims to improve oral presentation skills by making tutorial participation an assessable component of the subject.

MATH317 Financial Calculus and Logistics 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** MATH202 and (STAT131 or STAT231)**Assessment:** Assignments - 30%; Final examination - 70%.

Subject Description: MATH317 is an elective subject available to students enrolled in the degree courses primarily offered within this School. The subject consists of two sections: Financial Calculus: This is an introductory mathematical modelling course into the rapidly accelerating area of financial derivatives. It explores the properties of options and provides a theoretical framework within which these options can be valued and hedged. Logistics: This section introduces general principles of mathematical logistics, using inventory modelling as the main example.

MATH321 Numerical Analysis 6cp**Spring** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** MATH202 and MATH203**Assessment:** Laboratory Reports - 20%; Assignments - 10%; Final Examination - 70%.

Subject Description: MATH321 is designed to extend the ideas developed in MATH202 and MATH203 as to how numerical and computational mathematics can be used to solve problems that have no analytic solution. The foci are problems in linear algebra and applications to real world problems. Specific techniques include algorithms for calculating eigenvalues and eigenvectors of a matrix.

MATH322 Algebra 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** Either MATH204 or MATH222**Assessment:** Assignments - 14%; Mid-Session Test - 16%; Final Examination - 70%.

Subject Description: MATH322 has been designed to develop clear and critical understanding, problem-solving skills and a capacity for rigorous argument. It builds on the group theory section of MATH204, and to a lesser extent upon the finite mathematics section of MATH222. An aim is to develop an appreciation of some of the concepts of modern algebra, including the work leading to the classification of finite simple groups completed around 1980.

MATH323 Topology and Chaos 6cp**Spring** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** MATH222**Assessment:** Assignments - 30%; Final Examination - 70%.

Subject Description: MATH323 aims to develop critical understanding and problem-solving skills in the context of topology and chaos theory. It is intended to convey some of the impact of chaos theory in other areas and encourage interest of the student in phenomena such as the Koch curve. Some concepts discussed are notions of distance, dynamical systems, fractals and the Mandelbrot set.

MATH325 Wavelets 6cp*Not on offer in 2004***Prerequisites:** MATH201 and MATH203; MATH222 is desirable but not essential.**Assessment:** Assignments 15%; mid-session exam 15%, Final examination 70%.

Subject Description: The theory of wavelets is a branch of mathematical analysis which has developed rapidly over the last 15 years. Wavelets are widely and increasingly important in applications, and at the same time their study permits an accessible introduction to some of the key ideas of modern mathematical analysis. Major topics covered include inner product spaces and the notion of convergence in inner product spaces, Hilbert spaces and Fourier series in Hilbert spaces, the Haar wavelet, and techniques for the construction and analysis of wavelets in general.

MATH345 Mathematics Project B 6cp**Autumn / Spring** Wollongong On campus**Contact Hours:** 3 hours per week**Pre-requisites:** 24 credit points at 200 level**Restrictions:** This subject is only for students enrolled in the BMath(Advanced) degree

Assessment: Assessment will depend upon the content and circumstances of the project, and will be specified in advance for each student. Assessment may include: (1) a written report; (2) a spoken presentation; (3) evaluation of performance in a business or industrial placement; (4) evaluation in part by examination; and (5) assignments

Subject Description: The subject is a project individually chosen for the student, at a level appropriate to the 300 classification. The content may consist of (1) a placement in business or industry where substantial use is made of mathematical techniques; or (2) a project directed towards

independent investigation by the student, written and/or oral presentations, and substantial interaction of the student with the supervisors of the project and other members of staff; or (3) a project directed to mastery of a mathematical package or language, with specific use of the package or language in some application or area of mathematics; or (4) a project of research collaboration with a member or members of staff, of which written and spoken presentation would be a part. Other projects which are appropriate but not primarily in one of these single categories may occur, such as a project combining features of (1) and (2).

MATH371 Special Topics in Industrial and Applied Mathematics 3 6cp

Spring / Autumn

Contact Hours: 3 hours per week

Assessment: Assessment methods will be determined after specification of objectives.

Subject Description: Entry to this subject is at the discretion of the Head of the School of Mathematics and Applied Statistics. This subject may not be offered in any particular year. MATH371 is one of a number of elective subjects available to students enrolled in the degree courses offered by the School. The aim of this subject is to provide students with specialist applied mathematical skills. Topics will be selected from the areas of interest of staff members of the School or visiting staff members.

MATH372 Special Topics in Mathematical Analysis 3 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: At discretion of Head of School

Assessment: Assessment methods will be determined after specification of objectives.

Subject Description: Entry to this subject is at the discretion of the Head of the School of Mathematics and Applied Statistics. This subject may not be offered in any particular year. MATH372 is one of a number of elective subjects available to students enrolled in the degree courses offered by the School. The aim of the subject is to provide students with advanced mathematical concepts and skills. Topics will be selected from the areas of interest of staff members of the School or visiting staff members.

MATH401 Mathematics 4 (Honours) 48cp

Annual Wollongong On Campus

Contact Hours: 10 hours per week

Pre-requisites: At discretion of Head of School

Assessment: The coursework component is worth 70% of the total assessment in the subject MATH401. The Project is worth 30%.

Subject Description: A candidate must select 7 topics (a candidate may select 8 or more topics with approval from the Head of the School) from those on offer at the 400 level in Mathematics and Statistics. The topics are usually sessional, and a candidate will normally take 4 topics in one session, 3 in the other. With the approval of the Head of the School, up to 2 of these topics may be replaced by 300 level Mathematics and Statistics subjects that may be considered appropriate to complement a particular candidate's previous undergraduate studies. A candidate will complete a Project in an area of

interest under the close supervision of one or more members of staff of the School.

MATH411 Mathematical Sciences Honours Project A 12cp

Annual Wollongong On Campus

Contact Hours: 8 hours per week

Pre-requisites: Subject to approval of head of school

Assessment: Report - 80%; Seminar - 20%.

Subject Description: MATH411 is a final year honours subject for Mathematics-Statistics/Science strand students. It is a project conducted under the supervision of one or more relevant members of academic staff. The aim is to provide students with mathematical skills which can be used effectively in scientific work.

MATH412 Mathematical Sciences Environmental Honours Project A 12cp

Annual Wollongong On Campus

Contact Hours: 8 hours per week

Pre-requisites: Subject to approval of head of school

Assessment: Report - 80%; Seminar - 20%.

Subject Description: MATH412 is a final year honours subject for Mathematics/Geoscience and Mathematics/ Ecology strands students. It is a project conducted under the supervision of one or more relevant members of academic staff. The aim is to provide students with mathematical skills which can be used effectively in scientific work.

MATH471 Honours Topics in Mathematics A 6cp

Spring / Autumn Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: Subject to approval of Head of School

Assessment: Assignments - 20%; Final Examination - 80%.

Subject Description: MATH471, MATH472, MATH473 and MATH474 are offered to BMathEcon, BMathFin, and BMathSc candidates. The aim of each of these subjects is to provide students with mathematical skills which can be used effectively in the relevant discipline. Students may be required to present some part of the course to the rest of the class, in a working seminar. The content is a topic from those offered in a particular year at 400-level within the subject MATH401, and which may vary from year to year.

MATH472 Honours Topics in Mathematics B 6cp

Spring / Autumn Wollongong On Campus

Contact Hours: 2 hours per week

Assessment: Assignments - 20%; Final Examination - 80%.

Subject Description: MATH471, MATH472, MATH473 and MATH474 are offered to BMathEcon, BMathFin, and BMathSc candidates. The aim of each of these subjects is to provide students with mathematical skills which can be used effectively in the relevant discipline. Students may be required to present some part of the course to the rest of the class, in a working seminar. The content is a topic from those offered in a particular year at 400-level within the subject MATH401, and which may vary from year to year.

STAT131 Understanding Variation and Uncertainty 6cp

Autumn/ Spring Wollongong On Campus
Autumn Loftus On Campus

Contact Hours: 6 hours per week

Assessment: Assignments, Portfolio of In-Session work, Mid-Session Test - 50%; Examination - 50%

Subject Description: Variation and uncertainty occur in most aspects of life. Topics covered include Displaying variation and summarising data; Statistical computing and report writing; Probability Models: Markov Chains, binomial, Poisson; Modelling Uncertainty: Normal and other continuous distributions; Sampling Distributions - Central Limit Theorem; Inference - Point and Interval Estimation, Hypothesis Testing.

STAT151 Introduction to the Concepts and Practice of Statistics 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week

Exclusions: Not to count with STAT131 or STAT252

Assessment: Assignments - 30%; Mid-Session Test and Summary - 10%; Final Examination - 60%

Subject Description: STAT151 enables students to understand the statistical content of articles in their own discipline. Includes exploratory data analysis; samples and populations; elementary probability; the Normal, binomial and Poisson distributions; estimation and confidence intervals; hypothesis testing for means, proportions and regression analysis; sensitivity and specificity.

STAT171 Understanding Variation and Risk 6cp
Not on offer in 2004

Assessment: Assignments, Portfolio of In-Session work, Mid-Session Test - 50%; Examination - 50%

Subject Description: Variation and uncertainty occur in most aspects of life. Topics covered include Displaying variation and summarising data; Statistical computing and report writing; Probability Models: Markov Chains, binomial, Poisson; Modelling Uncertainty: Normal and other continuous distributions; Sampling Distributions - Central Limit Theorem; Inference - Point and Interval Estimation, Hypothesis Testing.

STAT231 Probability and Random Variables 6cp

Autumn Wollongong On Campus

Contact Hours: 4 hours per week

Prerequisites: MATH188 or enrolment in course code 762A.

Assessment: Assignments - 20%; Examination - 80%

Subject Description: STAT231 applies statistical tools to the modelling and analysis of random experiments. Includes graphical and numerical data presentation; statistical computing; discrete random variables (binomial, geometric, hypergeometric and Poisson) and continuous random variables (uniform, Normal and gamma); expected values; transformations; moment generating functions; multivariate distributions; the Poisson process.

STAT232 Estimation and Hypothesis Testing 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: STAT231

Assessment: Assignments - 30%; Examination - 70%

Subject Description: STAT232 develops techniques of statistical inference and statistical analysis. The inference techniques are sampling distributions (such as chi-squared, t and F distributions), methods and criteria of estimation, and hypothesis testing. The analysis techniques are nonparametric testing (such as the sign, median and Wilcoxon tests), simple linear regression and one and two-way analysis of variance.

STAT235 Statistics Project A 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: 24 credit points at 100 level including MATH110

Restrictions: The subject is only for students enrolled in the BMath(Advanced) degree

Assessment: Assessment will depend upon the content and circumstances of the project, and will be specified in advance for each student. Assessment may include: (1) a written report; (2) a spoken presentation; (3) evaluation of performance in a business or industrial placement; (4) evaluation in part by examination; and (5) assignments

Subject Description: The subject is a project individually chosen for the student, at a level appropriate to the 200 classification. The content may consist of: (1) a placement in business or industry where substantial use is made of statistical techniques; or (2) a project directed towards independent investigation by the student, written and/or oral presentations, and substantial interaction of the student with the supervisors of the project and other members of staff; or (3) a project directed to mastery of a statistical package or language, with specific use of the package or language in some application or area of statistics; or (4) a project of research collaboration with a member or members of staff, of which written and spoken presentation would be a part. Other projects which are appropriate but not primarily in one of these single categories may occur, such as a project combining features of (1) and (2) above.

STAT252 Statistics for the Natural Sciences 6cp

Spring Wollongong On Campus

Contact Hours: 4 hours per week

Pre-requisites: 24 credit points

Exclusions: Not to count with STAT131 or STAT151 or STAT231 or STAT232 or PSYC232

Assessment: Assignments - 30%; Mid-session Test and Summary - 10%; Final examination - 60%

Subject Description: STAT252 provides an introduction to statistical techniques. Topics covered are: data presentation; probability, binomial and Poisson distributions; Normal distribution; inference for single samples; comparison of two samples; analysis of variance and multiple comparisons; linear regression and correlation; goodness-of-fit testing and contingency tables.

STAT291 Engineering Statistics 3cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** MATH142 or MATH188**Exclusions:** Not to count with STAT231.

Subject Description: (Part of MATH283) In this topic, methods of collecting and summarising data are discussed. Statistical inference methods concerning population means, proportions and variances are given. Linear and multiple regression methods are used to develop mathematical relationships among variables and to predict variables of interest. Some basic advantages of using experimental planning are discussed. Latin square and randomised block experimental designs are discussed. Students will be introduced to a major statistical package.

STAT304 Operations Research and Applied Probability 6cp**Spring** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** Either (MATH188 and [STAT131 or STAT231]) or MATH283**Assessment:** Assignments - 30%; Examination - 70%.

Subject Description: The operations research component includes linear programming, simplex algorithm, duality, sensitivity analysis, transportation and assignment problems, integer programming, and use of computer software. The applied probability component includes Markov chains, birth and death processes and queuing theory.

STAT332 Multiple Regression and Time Series 6cp**Spring** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** STAT232**Assessment:** Assignments 40%; Examination 60%

Subject Description: STAT332 is an advanced course covering relationships between variables and the analysis of observational studies and designed experiments. Topics covered include multiple linear regression, non-linear regression, generalised linear regression, ARIMA models, forecasting of time series and Box-Jenkin's approach.

STAT333 Statistical Inference and Multivariate Analysis 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** STAT232**Assessment:** Assignments 25%; Examination 75%.

Subject Description: STAT333 covers inference (estimation and hypothesis testing) in both one and many dimensions. Topics covered include transformations, maximum likelihood and minimum variance unbiased estimation, the likelihood ratio, score and Wald tests, vector random variables, the multivariate Normal distribution, principal components analysis, factor analysis and discriminant analysis.

STAT335 Sample Surveys and Experimental Design 6cp**Autumn** Wollongong On Campus**Contact Hours:** 3 hours per week

Pre-requisites: STAT232 or STAT252 at Credit level or better, or STAT151 at Credit level or better, or PSYC232 at Credit level or better, or ECON121 at Credit or better, or (STAT131 & STAT231 both at Credit or better)

Assessment: Assignments - 25%; Examination - 75%.

Subject Description: STAT335 develops skills in designing and analysing statistical investigations. Statistical computing is an essential part of the course. Topics covered: Experimental designs: completely randomised, randomised complete block, Latin Square, factorial; the analysis of the data arising from these designs. Steps in conducting a sample survey; methods such as simple random sampling and stratified sampling, number raised and ratio estimation.

STAT345 Statistics Project B 6cp**Autumn / Spring** Wollongong On Campus**Contact Hours:** 3 hours per week**Pre-requisites:** 24 credit points at 200 level

Restrictions: The subject is only for students enrolled in the BMath(Advanced) degree

Assessment: Assessment will depend upon the content and circumstances of the project, and will be specified in advance for each student. Assessment may include: (1) a written report; (2) a spoken presentation; (3) evaluation of performance in a business or industrial placement; (4) evaluation in part by examination; (5) assignments.

Subject Description: The subject is a project individually chosen for the student, at a level appropriate to the 300 classification. The content may consist of (1) a placement in business or industry where substantial use is made of statistical techniques; or (2) a project directed towards independent investigation by the student, written and/or oral presentations, and substantial interaction of the student with the supervisors of the project and other members of staff; or (3) a project directed to mastery of a statistical package or language, with specific use of the package or language in some application or area of statistics; or (4) a project of research collaboration with a member or members of staff, of which written and spoken presentation would be a part. Other projects which are appropriate but not primarily in one of these single categories may occur, such as a project combining features of (1) and (2) above.

STAT355 Sample Surveys and Experimental Design (with Project) 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hours Lectures, 1 hour Tutorial per week plus consultation with supervisor

Pre-requisites: STAT232 or STAT252 at Credit level or better, or STAT151 at Credit level or better, or PSYC232 at Credit level or better, or ECON121 at Credit or better, or (STAT131 & STAT231 both at Credit or better)

Exclusions: STAT335

Assessment: Assignments 20%; Project 25%; Examination 55%. (Note: students should expect to work on the project for 4 hours per week all session).

Subject Description: STAT355 develops skills in designing and analysing statistical investigations. Statistical computing is

an essential part of the course. Topics covered: Experimental designs: completely randomised, randomised complete block, Latin Square, factorial; the analysis of the data arising from these designs. Steps in conducting a sample survey; methods such as simple random sampling and stratified sampling, number raised and ratio estimation.

STAT373 Special Topics in Probability and Statistics 3 6cp

Spring / Autumn Wollongong On Campus

Contact Hours: 3 hours per week

Pre-requisites: Entry to this subject is at the discretion of the Head of the School of Mathematics and Applied Statistics. This subject may not be offered in any particular year.

Assessment: A combination of assignments, projects, mid-session and examination.

Subject Description: STAT373 will be available at the discretion of the head of the School. Topics will be selected from areas of expertise of visiting staff members, or from other subjects offered by the School of Mathematics and Applied Statistics.

STAT383 Statistics For Engineers 4cp

Not on offer in 2004

Assessment: Assignments and In-Session work - 30%; Examination - 70%.

Subject Description: STAT383 develops the capability to understand and apply appropriate statistical tools. Topics covered include methods of collecting and summarising data; statistical inference concerning population means, proportions and variances; linear and multiple regression; basic advantages of using experimental planning; experimental designs: randomised block, Latin square designs, factorial experiments.

STAT401 Statistics 4 (Honours) 48cp

Annual Wollongong On Campus

Contact Hours: 10 hours per week

Pre-requisites: At least 36 cp of maths 300 level subjects, and the approval of the Head of School.

Assessment: Coursework - 70%; Project - 30%.

Subject Description: The subject consists of two components, one being coursework, the other a project. Coursework Requirements: A candidate must select seven topics from those on offer at the 400 level in Statistics and Mathematics to satisfy the requirements of this part of the course. The topics are usually sessional, and a candidate will normally take four topics in one session and three in the other. With the approval of the Head of the School, up to two of these topics may be replaced by 300 level Statistics and Mathematics subjects that may be considered appropriate to complement a particular candidate's previous undergraduate studies.

STAT411 Mathematical Sciences Honours Project B 12cp

Annual Wollongong On Campus

Contact Hours: 2 hours week

Pre-requisites: Subject to approval by Head of School

Assessment: Seminar - 70%; Project Report - 30%.

Subject Description: STAT411 and STAT412 are only offered to BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. These subjects

are projects conducted under the supervision of one or more relevant members of academic staff.

STAT412 Mathematical Sciences Environmental Honours Project B 12cp

Annual Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: Subject to approval of Head of School

Assessment: Seminar - 70%; Project Report - 30%.

Subject Description: STAT411 and STAT412 are only offered to BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. These subjects are projects conducted under the supervision of one or more relevant members of academic staff.

STAT413 Mathematical Sciences Public Health Honours Project B 12cp

Annual Wollongong On Campus

Contact Hours: 2 hrs per week.

Prerequisites: Subject to approval of Head of School

Assessment: Seminar 70%; Project Report 30%.

Subject Description: STAT411, 412 and STAT413 are only offered to BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. These subjects are projects conducted under the supervision of one or more relevant members of academic staff.

STAT471 Honours Topics in Statistics A 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 25%; Examination - 75%.

Subject Description: STAT471, STAT472, STAT473 and STAT474 are only offered to BMathFin, BMathEcon and BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. A topic from those offered in a particular year at 400-level within the subject STAT401, and which may vary from year to year.

STAT472 Honours Topics in Statistics B 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 25%; Examination - 75%.

Subject Description: STAT471, STAT472, STAT473 and STAT474 are only offered to BMathFin, BMathEcon and BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. A topic from those offered in a particular year at 400-level within the subject STAT401, and which may vary from year to year.

STAT473 Honours Topics in Statistics C 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 25%; Examination - 75%

Subject Description: STAT471, STAT472, STAT473 and STAT474 are only offered to BMathFin, BMathEcon and

Subject Descriptions

BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work.

A topic from those offered in a particular year at 400-level within the subject STAT401, and which may vary from year to year.

STAT474 Honours Topics in Statistics D 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 2 hours per week

Pre-requisites: MATH188

Assessment: Assignments - 25%; Examination - 75%.

Subject Description: STAT471, STAT472, STAT473 and STAT474 are only offered to BMathFin, BMathEcon and BMathSc candidates. Students will acquire statistical skills which can be used effectively in scientific work. A topic from those offered in a particular year at 400-level within the subject STAT401, and which may vary from year to year.

LAW SUBJECT DESCRIPTIONS

LAW 100 Law in Society 6cp

Autumn	Wollongong	On Campus
Autumn	Shoalhaven	On Campus
Autumn	Batemans Bay	On Campus
Autumn	Bega/ Moss Vale	On Campus
Autumn	Dubai	On Campus

(Sept04-Jan05)

Contact Hours: Normally, 2 hours Tutorial per week.

Exclusions: Not to count with LLB100 or LAW130.

Assessment: Class participation; assignments; examination.

Subject Description: Effective participation in the business world, and in society in general, requires some understanding of the law and of legal processes. Law in Society aims to provide the knowledge and skills to achieve these goals. The subject introduces students to various stages of setting up and operating a small business and the areas of law most relevant to each stage. The consideration of the law focuses on its practical implications for achieving business objectives and preventing legal problems arising.

LAW 210 Contract Law 6cp

Spring	Wollongong	On Campus
Spring	Shoalhaven	On Campus
Spring	Batemans Bay	On Campus
Spring	Bega/ Moss Vale	On Campus
Autumn	Dubai	On Campus

(Sept04-Jan05)

Contact Hours: Normally 2 hours Lecture per week.

Pre-requisites: LAW100 or LAW130.

Exclusions: Not to count with LLB210

Assessment: Problem question; examination.

Subject Description: A study of the common law governing contractual relationships together with an outline of relevant statutory modifications, including an introduction to the sale of goods and consumer law. The subject allows the student to have an understanding that contract law is the basis of commercial law and is thus essential for persons wishing to engage in business. Indeed the formation of contracts is an integral part of the conduct of any business enterprise and an ability to interpret and understand such contracts will enable the person involved in the business to make informed decisions and be aware of alternatives.

LAW 302 Law of Business Organisations 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 1 hour Lecture, 2 hours Seminar, per week.

Pre-requisites: LAW210.

Exclusions: Not to count with LLB302.

Assessment: Assignment; class tests; seminar presentation or class participation; and final examination.

Subject Description: The subject outlines the key features of the different legal structures which people might adopt for their business and voluntary activities. The legal regulation of two of these, partnership and a company incorporated under the Corporations Act, are then considered in depth. Practical applications of the law, and public policy dimensions, are addressed throughout the subject.

LAW 303 Children, Families and the Law 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 4 days intensive.

Pre-requisites: LAW100.

Exclusions: Not to count with LLB303.

Assessment: Essay; class participation; class exercises; and quiz.

Subject Description: To develop in students a satisfactory level of understanding of all aspects of the Family Law Act and related legislation.

LAW 304 Criminal Law and the Process of Justice 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 2 hours Seminar per week.

Pre-requisites: LAW100.

Exclusions: Not to count with LLB304.

Assessment: Essay; examination.

Subject Description: This subject is an introduction to: the general principles of criminal liability; major categories of offences and selected defences; and aspects of criminal procedure.

LAW 308 Administrative Law 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LAW100

Exclusions: Not to count with LLB308

Assessment: Problem assignment and exam.

Subject Description: The notion of the state and state power; limitations on state power; the constitutional structure of the Australian nation-state; the notion of division and separation of powers; mechanisms of accountability and control of government officials, including access to government information, the Ombudsman, merits review tribunals and judicial review.

LAW 315 Taxation Law 6cp

Spring	Wollongong	On Campus
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Contact Hours: 1 hour Lecture, 2 hours Seminar per week

Pre-requisites: LAW210.

Assessment: Essay, group assignment, seminar participation & presentation, and final exam.

Subject Description: This subject focuses on the structure of the Income Tax Assessment Acts (1936 & 1997); Fringe Benefits Tax Assessment Act 1986; and related legislation. General principles with respect to the assessability of income and deductibility of expenses are studied, together with the treatment of fringe benefits and capital gains.

LAW 316 Occupational Health & Safety Law 6cp

Autumn	Wollongong	On Campus
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Contact Hours: 4 days intensive.

Pre-requisites: LAW100 and 12 credit points in LAW subjects.

Assessment: Class participation; research essay; and examination.

Subject Description: This subject is concerned with the study of the legal regime governing health, safety and welfare of people at work in New South Wales. Its focus will be the Occupational Health and Safety Act 2000 and the Occupational Health and Safety Regulations 2001.

LAW 317 E-Commerce Law 6cp

Contact Hours: Not on offer in 2004.

Pre-requisites: LAW 210 and a minimum 48 credit points.

Assessment: Class participation; class tests; research essay OR class presentation and report.

Subject Description: This subject considers some of the more significant legal and regulatory issues that e-commerce has given rise to, and the efficacy of sustainability of the emerging responses to them. The subject begins with an overview of the structural framework of the cyber marketplace. It then focuses on starting up an on-line business activity, the legal issues at the forefront, and the progress thus far towards resolving them. Intellectual property aspects and privacy are particularly relevant at this stage. The subject then focuses on operating an on-line business and considers contract and consumer protection, and payment and security issues.

LAW 330 Law of Employment 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: (MGMT240) OR (LAW100 PLUS either COMM100 or LAW210).

Exclusions: Not to count with LLB330.

Assessment: Class participation, essay/project and examination.

Subject Description: The rights and duties of individual employers and employees under common law and selected legislation, including: formation, content and termination of the contract of employment; implied duties of employers and employees; remedies at common law; unfair dismissal legislation; unfair work contracts; occupational health and safety.

LAW 331 Intellectual Property Law 6cp

Autumn Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LAW210.

Exclusions: Not to count with LLB331.

Assessment: Class participation, research assignment and take-home examination.

Subject Description: This subject provides an overview of the field of intellectual property law commencing with an analysis of the 2 major and oldest forms of intellectual property – copyright and patents. The course then moves on to the methods of protecting business reputation both at common law/equity, and through the registration of trade marks. Other more recent forms of intellectual property are also covered, such as plant breeder's rights, designs and circuit layouts.

LAW 332 Labour Relations Law 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: (MGMT240) OR (LAW100 PLUS either COMM100 or LAW210).

Exclusions: Not to count with LLB332.

Assessment: Assignment, class participation, presentation and examination.

Subject Description: The legal regulation of collective relations between employers and employees under the Workplace Relations Act 1996 (Cth). Topics include: constitutional requirements; parties to an industrial dispute; powers of industrial tribunals (including natural justice); processes of award making and variation; collective bargaining and certified agreements; Australian Workplace Agreements; legal regulation of trade unions; law of industrial action.

LAW 334 Environmental Law 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LAW100.

Exclusions: Not to count with LLB334, LAW380 or LLB3911.

Assessment: Take-home assignment and a final examination.

Subject Description: The goal of this subject is to enable candidates to develop a basic, critical understanding of the law in relation to environmental management in Australia, with particular emphasis on NSW, including the limitations of legal instruments in achieving environmental management and policy objectives.

LAW 335 Anti-Discrimination Law 6cp

Spring Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hours Seminar per week

Pre-requisites: LAW100.

Exclusions: Not to count with LLB335

Assessment: Essay/research project, class participation and examination.

Subject Description: An analysis and appraisal of laws prohibiting discrimination in Australia on various grounds, including: sex, marital status, carer responsibilities, race, disability, age, sexual preference and transgender. Laws prohibiting harassment and vilification will also be examined. The subject includes exploration of the aims and social context of anti-discrimination legislation, as well as related concepts such as equal opportunity, social justice and affirmative action. Examination of processes for complaints, dispute resolution and enforcement, and powers of investigative and adjudicatory bodies.

LAW 343 International Law 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LAW100.

Exclusions: Not to count with LLB343 or INTR900.

Assessment: Research essay and a final examination.

Subject Description: Sources of international law; the relationship between domestic law and international law; the law of treaties; the structure of the international legal system; statehood, state jurisdiction, state responsibility, nationality and refugees.

LAW 344 Indigenous Peoples and Legal Systems 6cp**Contact Hours:** Not on offer in 2004.**Pre-requisites:** LAW100 or ABST100.**Exclusions:** Not to count with LLB344.**Assessment:** Essay, research paper.

Subject Description: This subject introduces the relationship between Indigenous and non-Indigenous laws and legal systems in Australia. It considers the nature and status of Aboriginal and Torres Strait Islander laws, exploring some of the specific legal issues of current relevance to Indigenous peoples in Australia. Topics include the impact of European colonisation, over-representation in the criminal justice system, land rights and native title, recognition of Aboriginal law, and self-determination.

LAW 348 Media Law 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 72 cp including among completed subjects one of: (LAW100 and LAW210) or (COMS100 and COMS101 and LAW100) or other as may from time to time be approved**Exclusions:** Not to count with LLB348.**Assessment:** Research project, class tests, final examination.

Subject Description: An introduction to the law affecting information (in the broadest sense of the term) gathering and dissemination, and to the policies and philosophies informing the legal protection of and restrictions on freedom of speech.

LAW 352 Advanced Taxation Law 6cp**Autumn** Wollongong On Campus**Pre-requisites:** LAW315.**Exclusions:** Not to count with LLB341.**Assessment:** Research project, client interview and class participation.

Subject Description: In this subject students will be exploring selected aspects of income tax, capital gains tax, fringe benefits tax, the new goods and services tax and state taxes. The course is run on an intensive basis and features presentations from tax professionals and representatives from KPMG, the Australian Tax Office and the NSW Office of State Revenue.

LAW 360 Foreign Investment Law in the People's Republic of China 6cp**Autumn** Wollongong On Campus**Contact Hours:** 4 days intensive.**Pre-requisites:** LAW100.**Co-requisites:** LAW210.**Assessment:** Class participation, negotiation group work and final assignment.

Subject Description: An analysis of the laws and procedures regulating foreign investment in, and trade with, the PRC. This subject will examine those laws relating to: joint ventures and other forms of foreign investment; revenue and finance law including taxation, customs duties and exchange control; foreign trade including compensation trade, technology transfer and intellectual property; and dispute resolution.

LAW 380 Law for Environmental Managers 8cp**Spring** Wollongong On Campus**Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Pre-requisites:** 72 credit points in a discipline other than Law.**Exclusions:** Not to count with LAW334.**Assessment:** Take-home assignment and a final examination.

Subject Description: The goal of this subject is to enable candidates to develop a basic, critical understanding of the law in relation to environmental management in Australia, with particular emphasis in NSW, including the limitations of legal instruments in achieving environmental management and policy objectives.

LLB 100 Foundations of Law A 6cp**Autumn** Wollongong On Campus**Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Exclusions:** Not to count with LAW100.**Assessment:** Essay, class participation, problem assignment, and take home exam.

Subject Description: The subject introduces students to the legal system, legal terminology and legal concepts in a broader context and allows students to start thinking about the values law embodies, implicitly and explicitly, and their relationship to society. This approach also enables students to reflect upon the law in theory and in practice, the knowledge needed to make sense of the difference and the skills needed to mediate it successfully. In addition, the subject provides opportunities to start practising the legal skills of statutory interpretation and case analysis which are fundamental to the study and practice of law. Finally, the subject requires students to reflect upon their own assumptions and values.

LLB 110 Legal Research and Writing 4cp**Autumn** Wollongong On Campus**Contact Hours:** 2 hour lab per week.**Co-Requisites:** LLB100 or LAW810**Assessment:** Assignments, oral presentation, and quizzes.

Subject Description: This subject comprises values, knowledge and skills. Accordingly, the subject introduces students to basic legal writing skills, legal terminology and legal concepts in a broader context which allows students to start thinking about the values law embodies, implicitly and explicitly, and their relationship to society. This subject also introduces students to legal research & writing, oral presentation skills and to statistical literacies. In addition, the subject provides opportunities to start practising the legal skills of statutory interpretation and case analysis which are fundamental to the study and practice of law.

LLB 200 Foundations of Law B 6cp**Spring** Wollongong On Campus**Contact Hours:** 2 hour Seminar per week.**Prerequisites:** LLB100 and LLB110.**Exclusions:** LLB222**Assessment:** Assignments, class participation, and exam.

Subject Description: The subject explores the sources of law, the application of law and ways of arguing the law. It aims to contribute to students foundational understanding of law and its place in Australian society by encouraging social and

philosophical analysis of key issues dealt with in other areas of first year LLB program.

LLB 210 Law of Contracts 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB100.

Exclusions: Not to count with LAW210.

Assessment: Case note; mid session assignment; class participation; and final examination.

Subject Description: The subject introduces the context and significance of contract law, especially in relation to commercial dealing. Using the case book method, students study the legal principles as to formation of a contract, privity of contract, the terms of the contract, the contract excuses, performance breach and termination of the contract, and remedies for breach of contract. Similarly, students study promissory estoppel. The subject is designed to facilitate students acquiring a sound knowledge of the basic legal principles of the discipline area and their diverse applications.

LLB 300 Remedies and Procedure 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB210 and LLB307.

Assessment: Class participation, assignment and examination.

Subject Description: The Remedies component of this subject explores the major legal and equitable remedies available in a civil action. These judicial remedies are considered according to the particular purpose or goal that they are intended to achieve, including compensation, punishment, restitution and coercion. In addition, some attention is given to non-judicial (or "self help") remedies. The Civil Procedure component of the subject examines pre-trial procedure in civil actions in the Supreme Court of New South Wales. Topics covered include determining who may be a party to the proceedings; choosing originating process; serving court process; pleading; bringing proceedings to an early end; obtaining discovery and administering interrogatories.

LLB 301 Evidence 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB304.

Assessment: Research essay, moot or assignment, class participation and final examination.

Subject Description: Students will be introduced to the rules relating to the sources and admissibility of evidence in civil and criminal trials. Topics will include the burden and standard of proof; the examination of witnesses; character evidence; documentary evidence; and the rules in relation to opinion evidence, hearsay, confessions and admissions; illegally obtained evidence; discretions and warnings.

LLB 302 Law of Business Organisations 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB306.

Exclusions: Not to count with LAW302.

Assessment: Assignments and examination.

Subject Description: The subject introduces the central concerns of a law of organisations, and of the law of business organisations, and the public policies informing the development of the Australian legal response. The range of organisations available for business and non-business purposes and their legal regulation are overviewed. Partnerships and companies and their legal regulations are considered in depth, including current policy issues.

LLB 303 Family, Children and Welfare 8cp

Autumn Wollongong On Campus

Contact Hours: 4 days intensive.

Pre-requisites: 48 credit points of LLB subjects.

Exclusions: Not to count with LAW303.

Assessment: Essay; class participation; class exercises; quiz and final examination.

Subject Description: To develop in students a satisfactory level of understanding of all aspects of the Family Law Act and related legislation.

LLB 304 Criminal Law and the Process of Justice 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: LLB100.

Exclusions: Pre-requisites apply only to candidates in double degree courses; not to count with LAW304.

Assessment: Essay and examination.

Subject Description: This subject is an introduction to: general principles of criminal liability; major categories of offences and selected defences; and aspects of criminal procedure.

LLB 305 Property and Trusts A 8cp

Autumn Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB210.

Assessment: Class participation, assignment and final examination.

Subject Description: Consideration of the notion of property and interests in property; the distinctions between real, personal and intangible property; the notions of ownership, title and possession; legal and equitable interests in property (including the resulting and constructive trust); legal protection of property interests. The law of landlord and tenant, easements and covenants.

LLB 306 Property and Trusts B 8cp

Spring Wollongong On Campus

Contact Hours: 1 hour Lecture, 2 hours Seminar per week.

Pre-requisites: LLB305.

Assessment: Class participation; assignment and final examination.

Subject Description: The modern law of real property, including Torrens title, mortgages and co-ownership. The law of express trusts, including the powers and obligations of trustees, and remedies of the beneficiary for breach of trust.

LLB 307 Law of Torts 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2 x 1 hour Lectures, 1 hour Seminar per week.**Pre-requisites:** LLB210.**Assessment:** Assignments and examination.

Subject Description: Introduction to the law of civil wrongs, its aims, operation and relationship to other societal mechanisms of compensation. Topics include negligence; intentional torts; nuisance. The focus will be the development of the common law and the operation of public policy granting relief in a variety of tort actions.

LLB 308 Public Law A 8cp**Autumn** Wollongong On Campus**Contact Hours:** 1 hour Lecture, 2 hours Tutorial per week.**Pre-requisites:** LLB100.**Assessment:** Problem assignment and exam.

Subject Description: The notion of the state and state power; limitations on state power; the constitutional structure of the Australian nation-state; the notion of division and separation of powers; mechanisms of accountability and control of government officials, including access to government information, the Ombudsman, merits review tribunals and judicial review.

LLB 309 Public Law B 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** LLB308.**Assessment:** Research essay 40%; exam 60%.

Subject Description: Division of power between Commonwealth and State legislatures; the structure and powers of State and Commonwealth governments, with special emphasis on the limitation of the power of the Commonwealth; the place of the judiciary and judicial review of legislative and executive power; Commonwealth and State fiscal powers; express and implied constitutional rights; constitutional change.

LLB 311 Lawyers and Australian Society 8cp**Autumn / Spring** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** LLB304.**Co-requisites:** LLB210.

Assessment: Research essay or project 35%, Problems in Professional Responsibility assignment 40%, class participation 10% (total will be scaled back to 60%) and placement program 40%.

Subject Description: This subject falls into two parts. 1) the nature of professionalism and ethics; the 'legal profession', its regulation, and its rules of conduct; and how the law in practice relates to access to justice. 2) a practical or clinical element, in which students can observe and participate in the practice and operation of the law, through the Professional Experience Placement Program. Each student must undertake 2 placements each of 20 working days of professional experience, in two different legal environments approved by the Faculty. The Placement Program is undertaken after the Course work in the subject has been completed.

LLB 312 Legal Theory 8cp**Spring** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects including LLB222.**Assessment:** Assignment; research essay; class participation.

Subject Description: This subject addresses a selection of issues in jurisprudence, including the nature of law, the basis for legal authority, the scope and limits of law, and the relationship between law, morality and values such as justice, liberty, pluralism and autonomy.

LLB 313 Legal Research Project A 8cp**Spring / Autumn** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects.

Assessment: Performance is assessed by progress on a number of tasks, with the greatest weight given to the final research paper. The research paper will be assessed by two persons appointed by the Dean on the recommendation of the subject co-ordinator. Each examiner must provide a written report which will be made available to the students and the supervisor.

Subject Description: A supervised research paper of no more than 10,000 words on a subject selected by the student and agreed with a supervisor by week 4 of the session of enrolment.

LLB 314 Legal Research Project B 16cp**Annual** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects.

Assessment: Performance is assessed by progress on a number of tasks, with the greatest weight given to the final research paper. The research paper will be assessed by two persons appointed by the Dean on the recommendation of the subject co-ordinator. Each examiner must provide a written report which will be made available to the students and the supervisor.

Subject Description: A supervised research paper of no more than 25,000 words on a subject selected by the student and approved by the Dean by week 6 of the first session of enrolment in this subject.

LLB 316 Occupational Health & Safety Law 8cp**Autumn** Wollongong On Campus**Contact Hours:** 4 days intensive.**Pre-requisites:** 48 credit points of LLB subjects.

Assessment: Class participation; research essay; and examination.

Subject Description: This subject is concerned with the study of the legal regime governing health, safety and welfare of people at work in New South Wales. Its focus will be the Occupational Health and Safety Act 2000 and the Occupational Health and Safety Regulations 2001.

LLB 317 E-Commerce Law 8cp**Contact Hours:** Not on offer in 2004.**Pre-requisites:** 48 credit points of LLB Subjects.**Assessment:** Class participation; class tests; and research essay OR class presentation and report.**Subject Description:** This subject considers some of the more significant legal and regulatory issues that e-commerce has given rise to, and the efficacy of sustainability of the emerging responses to them. The subject begins with an overview of the structural framework of the cyber marketplace. It then focuses on starting up an on-line business activity, the legal issues at the forefront, and the progress thus far towards resolving them. Intellectual property aspects and privacy are particularly relevant at this stage. The subject then focuses on operating an on-line business and considers contract and consumer protection, and payment and security issues.**LLB 320 Commercial and Consumer Contracts 8cp****Autumn** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects.**Assessment:** Class participation; assignment and examination.**Subject Description:** The special rules relating to common commercial contracts, such as contracts of agency, contracts for the sale of goods, insurance contracts, and contracts of carriage; statutory restrictions on contracts.**LLB 321 Finance and Security 8cp****Spring** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects, including LLB306 and LLB302.**Assessment:** Class participation, assignment, examination.**Subject Description:** LLB321 Finance & Security is designed to develop in students a sound understanding of the law governing financial institutions in Australia, and the manner in which these institutions are regulated. The relationship between financial institutions and their customers will be examined, along with the impact of recent technological developments on this relationship and on the business of banking. The law dealing with cheques and other negotiable instruments will be discussed in detail. The issue of security for transactions with financial institutions will be analysed, along with the position of banks as creditors when a customer becomes bankrupt.**LLB 330 Law of Employment 8cp****Autumn** Wollongong On Campus**Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects.**Exclusions:** Not to count with LAW330.**Assessment:** Class participation; essay/project and examination.**Subject Description:** The rights and duties of individual employers and employees under common law and selected legislation, including: formation, content and termination of the contract of employment; implied duties of employers and employees; remedies at common law; unfair dismissal legislation; unfair work contracts; occupational health and safety.**LLB 331 Intellectual Property Law 8cp****Autumn** Wollongong On Campus**Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects.**Exclusions:** Not to count with LAW331.**Assessment:** Class participation, Tutorial Presentation, Research Essay, Take-home Examination.**Subject Description:** This subject provides an overview of the field of intellectual property law commencing with an analysis of the 2 major and oldest forms of intellectual property – copyright and patents. The course then moves on to the methods of protecting business reputation both at common law/equity, and through the registration of trade marks. Other more recent forms of intellectual property are also covered, such as plant breeders' rights, designs and circuit layouts.**LLB 332 Labour Relations Law 8cp****Spring** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects.**Exclusions:** Not to count with LAW332.**Assessment:** Assignment, class participation, presentation and examination.**Subject Description:** The legal regulation of collective relations between employers and employees under the Workplace Relations Act 1996 (Cth). Topics include: constitutional requirements; parties to an industrial dispute; powers of industrial tribunals (including natural justice); processes of award making and variation; collective bargaining and certified agreements; Australian Workplace Agreements; legal regulation of trade unions; law of industrial action.**LLB 334 Environmental Law 8cp****Autumn/Spring** Wollongong On Campus**Contact Hours:** 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB subjects.**Exclusions:** Not to count with LAW334 or LLB3911.**Assessment:** Take-home assignment, research essay, class participation/presentation of research progress/findings.**Subject Description:** The goal of this subject is to enable candidates to develop a basic, critical understanding of the law in relation to environmental management in Australia, with particular emphasis on NSW, including the limitations of legal instruments in achieving environmental management and policy objectives.**LLB 335 Anti-Discrimination Law 8cp****Spring** Wollongong On Campus**Contact Hours:** 1 hour Lecture, 2 hours Seminar per week.**Pre-requisites:** 48 credit points of LLB Subjects.**Exclusions:** Not to count with LAW335.**Assessment:** Essay/research project; class participation and examination.**Subject Description:** An analysis and appraisal of laws prohibiting discrimination in Australia on various grounds, including: sex, marital status, carer responsibilities, race, disability, age, sexual preference and transgender. Laws prohibiting harassment and vilification will also be examined. The subject includes exploration of the aims and social context

of anti-discrimination legislation, as well as related concepts such as equal opportunity, social justice and affirmative action. Examination of processes for complaints, dispute resolution and enforcement, and powers of investigative and adjudicatory bodies.

LLB 337 Comparative Studies in Law 8cp

Spring Wollongong On Campus

Contact Hours: 4 day intensive.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Research essay and final examination.

Subject Description: A comparison of the French civil law with the common law of England and Australia, with the objective of developing an appreciation of different legal systems and approaches.

LLB 339 Advanced Criminal Law and Procedure 8cp

Spring Wollongong On Campus

Contact Hours: 4 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects including LLB304.

Assessment: Essay, research paper, presentation.

Subject Description: This subject critically examines the role of the criminal justice system in the regulation of individual and organisational behaviour. Selected alternatives to conventional 'command and control' regulation are explored.

LLB 341 Revenue Law 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class presentation; written advice to clients involving 2 scenarios; class participation and assignment.

Subject Description: Revenue Law, or taxation law, is one of the highly technical fields of law bringing together economic, accounting and financial concepts into a legal construct for the determination of how the costs of good government are to be shared among the members of society. Taxation pervades everyone's life in some way, whether in the form of income tax, for instance, or some form of consumption or other tax like the GST. LLB341 is confined to the Income Tax Assessment Act (1936/97), the Fringe Benefits Tax Assessment Act and associated legislation. These fields alone provide more than enough content for a one semester subject, but are essential for those students seeking registration as CPAs or Chartered Accountants after completing a combined Commerce/Law degree.

LLB 343 International Law 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Exclusions: Not to count with LAW343 or INTR900.

Assessment: Research essay and final examination.

Subject Description: Sources of international law; the relationship between domestic law and international law; the law of treaties; the structure of the international legal system;

statehood, state jurisdiction, state responsibility, nationality and refugees.

LLB 344 Indigenous Peoples and Legal Systems 8cp

Contact Hours: Not on offer in 2004.

Pre-requisites: 48 Credit points of LLB subjects.

Exclusions: Not to count with LAW344.

Assessment: Essay, research paper.

Subject Description: This subject is an introduction to the relationship between Indigenous and non-Indigenous laws and legal systems in Australia. It considers the nature and status of Aboriginal and Torres Strait Islander laws, and explores some of the specific legal issues of current relevance to Indigenous peoples in Australia. Topics include the impact of European colonisation, over-representation in the criminal justice system, land rights and native title, recognition of Aboriginal law, and self-determination.

LLB 348 Media Law 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects.

Exclusions: Not to count with LAW348.

Assessment: Research project; class tests; examination.

Subject Description: An introduction to the law affecting information (in the broadest sense of the term) gathering and dissemination, and to the policies and philosophies informing the legal protection of and restrictions on freedom of speech.

LLB 350 Special Study in Law A 8cp

Spring / Autumn Wollongong On Campus

Pre-requisites: 48 credit points of LLB subjects and permission of Dean or Sub-Dean.

Subject Description: A study in depth of a selected area of law.

LLB 351 Special Study in Law B 8cp

Spring / Autumn Wollongong On Campus

Pre-requisites: 48 credit points of LLB subjects and permission of Dean or Sub-Dean.

Subject Description: A study in depth of a selected area of law.

LLB 354 Human Rights Law 8cp

Spring Wollongong On Campus

Contact Hours: 3 hours Seminar per week.

Prerequisites: 48 credit points of LLB Subjects.

Assessments: Essays 40%; Examination or Research Paper 60%.

Subject Description: The subject will cover aspects of public international human rights law and international humanitarian law. There will be an examination of the principal international instruments that underlie human rights law, as well as consideration to the manner these instruments are manifested in Australian domestic law. The operation of the international human rights system, both at a global and regional level will

also be examined and evaluated. The principal instruments in international humanitarian law will also be examined, as well as development of the International Criminal Court. The subject will be a useful complement to LLB335 Anti-Discrimination Law.

LLB 355 Bankruptcy & Corporate Insolvency Law & Practice 8cp

Contact Hours: Not on offer in 2004.

Prerequisites: 48 credit points of LLB subjects including LLB302.

Assessment: Essay; class participation; research essay.

Subject Description: In the wake of numerous recent and high profile 'corporate collapses', the subject will seek to give students an insight into the legal principles governing the consequent 'mopping-up' that must follow. The course will examine the duties of directors and companies in the period leading up to a corporate collapse and, will consider the position of creditors, employees and shareholders of the insolvent entity following the collapse. The role and duties of the various forms of administrator that may be appointed to an insolvent entity and the effect that such an appointment has on all who are involved with the entity will also be examined. Finally, the equivalent issues arising in relation to personal insolvency will be addressed.

LLB 356 Insurance Law 8cp

Contact Hours: Not on offer in 2004.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: 2 short answer papers; class participation; take home examination.

Subject Description: This subject will give an introduction to the general principles of insurance law. Including an overview of the legislation that regulates insurance, particularly the Insurance Contracts Act 1984 (Cth) and the Insurance (Agents and Brokers) Act 1984 (Cth), as well as an examination of the common law relating to insurance law. Consideration of the fundamental principles in insurance law such as the duty of utmost good faith, the duty of disclosure, double insurance and subrogation. This subject is taught with an emphasis on the practical application of the principles of insurance law.

LLB 360 Foreign Investment in the People's Republic of China 8cp

Autumn Wollongong On Campus

Contact Hours: 4 days intensive.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class participation; negotiation group work, final assignment.

Subject Description: An analysis of the laws and procedures regulating foreign investment in, and trade with, the PRC. This subject will examine those laws relating to: joint ventures and other forms of foreign investment; revenue and finance law including taxation, customs duties and exchange control; foreign trade including compensation trade, technology transfer and intellectual property; and dispute resolution.

LLB 362 Advanced Revenue Law 8cp

Autumn Wollongong On Campus

Pre-requisites: 48 credit points of LLB subjects including LLB341.

Assessment: Research project; client interview and class participation.

Subject Description: In this subject, students will be exploring selected aspects of income tax, capital gains tax, fringe benefits tax, the new goods and services tax and state taxes. The course is run on an intensive basis and features presentations from tax professionals, the Australian Tax Office, and the NSW Office of State Revenue.

LLB 391 Dispute Management Skills 2cp

Spring Wollongong On Campus

Contact Hours: 2 hours Seminar per week (weeks 7-13).

Co-requisites: LLB304.

Assessment: Attendance and participation in class exercises and role plays; planning and conducting a mediation (including filing a report).

Subject Description: This subject deals with the continuum of dispute resolution procedures available in legal practice, involving litigation, with emphasis on the skills of negotiation and mediation.

LLB 392 Communication Skills 2cp

Autumn/Spring Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Prerequisites: LLB100.

Assessment: Simulated interview with a client; written memorandum; oral presentation. Students must achieve a satisfactory standard.

Subject Description: The skills of listening, observing, presenting ideas clearly in non-threatening and adversary contexts, and the differences between them; eliciting information; difficulties in the use of interpreters and in eliciting information from children.

LLB 393 Drafting Skills 2cp

Spring / Autumn Wollongong On Campus

Contact Hours: 4 x 2 hours Seminar.

Co-requisites: LLB306.

Subject Description: The skills of modern legal drafting in plain English, including those skills employed in professional legal practice in planning, writing and reviewing letters, memoranda and other legal documents. An introduction to will drafting.

LLB 394 Advocacy Skills 2cp

Spring Wollongong On Campus

Contact Hours: 2 hours Seminar per week (weeks 1-6).

Pre-requisites: LLB304.

Assessment: 1. Participation in an advocacy exercise. 2. Class participation, including participation in simulations and role plays. 3. Preparation of a 'no bill' submission.

Subject Description: Introduction to the principles of advocacy, professional responsibility and courtroom etiquette, and criminal procedure. Exercises include practice court submissions and the preparation of written submissions.

LLB 396 **Advanced Legal Skills** 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hours Seminar per week.

Pre-requisites: 48 credit points of LLB subjects, including LLB300 and LLB301.

Subject Description: This subject builds on the core skills program, and is compulsory for students who intend to enrol in the Practical Legal Training Course at this university. The subject will encompass the following modules: litigation workshop – an intensive civil litigation workshop based around a case study with practical skills exercises; client or witness interviewing; conveyancing practise; and advanced advocacy – an introduction to the skills of trial advocacy, in both civil and criminal proceedings.

LLB3923 Law of the Sea 8cp

Spring Wollongong On Campus

Contact Hours: 4 day intensive.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class participation; assignment and take-home examination.

Subject Description: The evolving law of the sea from an historical perspective. The 1982 United Nations Convention on the Law of the Sea (LOSC) and its associated instruments. Maritime zones of jurisdiction and the navigational regime under LOSC. The major factors influencing the development of the law of the sea; the various interests involved in the law of the sea and how LOSC attempts to balance these interests.

LLB3924 International Environmental Law 8cp

Spring Wollongong On Campus

Contact Hours: Spring 4 day intensive.

Pre-requisites: 48 credit points of LLB subjects.

Assessment: Class participation; assignment and take-home examination.

Subject Description: The relevant legal rules at the international level designed to protect the global environment. The historical development of these rules and the institutional framework within which they are made and enforced. The weaknesses of environmental law, focusing on problems of domestic implementation.

LLB3927 Natural Resources Law Review 8cp

Autumn/Spring Wollongong On Campus

Pre-requisites: 48 credit points of LLB subjects and approval the subject co-ordinator.

Assessment: Revision of student research paper for publication, Preparation of case/legislation note, Editorial work.

Subject Description: Writing and editing of academic papers for the Australasian Journal of Natural Resources Law and Policy, a biannual publication by the Faculty of Law and distributed worldwide. Preparation of a case or legislation note for publication in the journal. Student will work in consultation with the Managing Editor and the subject co-ordinator.

SCIENCE SUBJECT DESCRIPTIONS

BIOL103 Molecules, Cells and Organisms 6cp

Spring Wollongong On Campus

Contact Hours: 2 hour lecture, 1 hour tutorial, 3 hour practical per week.

Assessment: Continuous Practical assessment; Practical quizzes; Assignment; Mid session Quiz; final practical examination; final theory examination.

Subject Description: Properties and characteristics of living systems. Cell structure and function. Micro-organisms and viruses. Cell division. Introductory biochemistry. Structure and function of the respiratory, digestive, excretory and muscular systems. Physiology of nervous and hormonal control systems and the immune system. Plant structure and function.

BIOL104 Evolution, Biodiversity and Environment 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hours lecture, 3 hours practical, 1 hour tutorial per week.

Assessment: Practical mini-quizzes; Insect collection; Project report - predation; Project report - seeds; Post-lecture mini-quizzes; Practical examination; Theory examination.

Subject Description: Types of organisms, their classification and life styles. Genetics. Animal behaviour. Ecology of populations and communities. Evolutionary biology and the origin of species.

BIOL213 Principles of Biochemistry 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hours lecture, 4 hours tutorial/practical per week.

Pre-requisites: BIOL 103 and (CHEM 101) or (CHEM 104) and (CHEM 102) or (CHEM 105)

Assessment: Practical reports; Dry practicals; Formal scientific reports; Theory Quiz; Practical exam; Theory exam.

Subject Description: Structure and biological functions of proteins, nucleic acids, carbohydrates and lipids and their subunits. Protein and nucleic acid synthesis in prokaryotes and eukaryotes. Membrane structure. Enzymes and their regulation. Intermediary metabolism.

BIOL214 The Biochemistry of Energy and Metabolism 6cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture, 3 hours practical, 1 hour tutorial per week.

Pre-requisites: BIOL213

Assessment: Practical assessment; Scientific report; Quiz; Practical exam; Theory exam.

Subject Description: The generation and storage of metabolic energy. The major catabolic pathways. The biosynthesis of carbohydrates, lipids, proteins and nucleotides. The regulation of enzymes and of metabolic pathways and their role in cellular function. The integration of metabolism. Metabolic disorders.

BIOL215 Introductory Genetics 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours lecture, 3 hours practical per week.

Pre-requisites: BIOL213

Assessment: 4 Practical reports; Practical assessment; Seminar; Theory exam.

Subject Description: Genetic variation in eukaryotic populations. Source of variation and techniques of measurement. Regulation of gene activity. Microbial genetics including transformation, conjugation and phage replication. Mechanisms for the rearrangement and exchange of genetic material including plasmids, recombination, transposons and genetic engineering.

BIOL240 Functional Biology of Plants and Animals 6cp

Autumn Wollongong On campus

Contact Hours: 3 hours lecture &/or tutorial, 3 hours practical per week.

Pre-requisites: BIOL103 and BIOL104

Assessment: Quiz; 2 Practical exams; 2 Written Assignments; Theory exam.

Subject Description: Functional morphology of plants and animals. Plant/environmental interactions. Physiological and behavioural responses of animals to various environments. Reproductive biology and life history patterns of plants and animals.

BIOL241 Biodiversity: Classification and Sampling 6cp

Spring Wollongong On Campus

Contact Hours: 3 hours lecture, 3 hours practical per week.

Pre-requisites: BIOL103 and BIOL104

Assessment: McClade report; Herbarium collection; Biodiversity paper; Theory exam; Practical exam.

Subject Description: Introduction to biological diversity. Identifying biodiversity. The species concept. Principles of classification (numerical and biochemical tools). Pitfalls in classification (coevolution, physical and evolutionary constraints). Use of keys. Making and curating a collection of selected groups of organisms. Environmental surveys: quantification and importance of biological diversity. Loss of biodiversity.

BIOL251 Principles of Ecology and Evolution 6cp

Autumn Wollongong On Campus

Contact Hours: 3 hours lecture, 3 hours practical per week.

Pre-requisites: BIOL103 and BIOL104

Assessment: Scientific writing; Competition experiment; Project progress; Seminar; Report; Practical examination; Theory examination.

Subject Description: Definitions of a population. Sampling and estimating density. Population growth and regulation. Interactions between organisms and community structure and function. Variation among organisms P genetic and environmental. Inheritance. Genetic structure of populations. Population size, breeding systems and selection, social

Subject Descriptions

evolution and evolution of life histories. Implications for human populations. Human ecology and ecological surveys.

BIOL292 Special Biology Studies 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 5 hrs lab/field work, 1 hr tutorial per week.

Pre-requisites: 48 cp; enrolment in BSc(Hons) - Adv Program

Assessment: Literature review presentation (oral or poster) 10%; project reports 50%; project seminars 10%; final examination 30%.

Subject Description: Students will undertake research projects, under the supervision of academic staff members, on design and execution of field and/or laboratory experiments and the analysis and interpretation of these data. Intending students must consult with the Head of Department prior to enrolment.

BIOL303 Biotechnology: Applied Cell and Molecular Biology 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 4 hours tutorial/practical pw.

Prerequisites: BIOL215

Assessment: Practical project report; Oral presentation of tutorial topic; Research project report; Theory exam.

Subject Description: Recombinant DNA technology and genetic engineering of micro-organisms, plant cells and animal cells. Expression, production and purification of recombinant proteins, cytokines and hormones. Fermentation technology and industrial scale-up. Applications of Biotechnology to the fields of human therapeutics, agriculture and diagnostics. Bioinformatics, ethical and patent issues of Biotechnology.

BIOL320 Molecular Cell Biology 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 4 hrs tutorial/practical per week.

Pre-requisites: BIOL 214 and BIOL 215

Assessment: Poster; 2 Practical Reports; Theory exam; Practical exam.

Subject Description: Biochemistry of major macromolecular components in eukaryotic cells including synthesis and regulation; assembly of molecular components into functional units in the cell; major cell functions - homeostasis, movement, energetics and recognition. Specific topics covered include proteins and nucleic acids, membranes, cytoskeleton, extracellular matrix, energetics. Practical work covers plant and animal cell culture and separation techniques - amino acid analysis, electrophoresis, flow cytometry, centrifugation and chromatography.

BIOL321 Cellular and Molecular Immunology 8cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 4 hrs tutorial/practical pw.

Pre-requisites: BIOL320

Assessment: Antibody Purification/Conjugation Project; Antibody Production/ELISA Project; Written assignments; Oral presentation of tutorial topic; Practical exam; Theory exam.

Subject Description: The immune system as a model for cellular division and differentiation. Role of factors and the cellular interactions required to generate antibodies and cell-mediated responses. Molecular basis of immunity. Molecular biology of viruses. Immuno-technology: Monoclonal antibodies, phage display antibodies, immuno-affinity chromatography, immuno-diagnostics, immunotherapies, flow cytometry.

BIOL332 Ecological and Evolutionary Physiology 8cp

Autumn Wollongong On Campus

Pre-requisites: BIOL240

Assessment: Project reports; Quiz; Theory exam.

Subject Description: Physiology and biochemistry of whole organisms with emphasis on response to environmental parameters and the development of physiological systems. Effect of body size on physiology. Water and salt regulation in aquatic, marine and terrestrial environments. Physiological responses of plants and animals to temperature, gas composition, light intensity, and pressure. Evolution of endothermy. Effects of hormones on physiology and behaviour.

BIOL351 Conservation Biology: Marine and Terrestrial Populations 8cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 4 hours tutorial/practical pw.

Pre-requisites: BIOL 241, BIOL 251, STAT 252

Assessment: Spotlighting arboreal mammals; practical workbook write-ups; teamwork contribution; theory examination.

Subject Description: Field camps are an integral part of this subject. Describing populations - demography, life tables, genetic structure. Factors regulating population growth - competition herbivory, predation, environmental disturbance. Natural selection. Frequency-dependence and density-dependence. Phenotypic plasticity. Sex, recombination and breeding systems. Localised adaptation. Sexual selection. Genetic basis of behaviour. Hybrids and hybrid zones. Mechanisms of evolution and speciation. Population biology in relation to conservation - minimum population sizes, inbreeding depression, genetic tolerance of extreme conditions.

BIOL352 Biology For Environmental Engineers 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture, 3 hrs practical, 1 hour tutorial per week.

Assessment: Same as BIOL 104.

Subject Description: See BIOL 104. This subject includes a set of tutorials specifically designed for Environmental Engineers.

BIOL355 Marine and Terrestrial Ecology 8cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 4 hrs tutorial/practical pw.

Pre-requisites: BIOL 241, BIOL 251, STAT 252,

Assessment: Project report, field camp report and seminar 60%; final examination 40%.

Subject Description: Introduction to ecology - levels of organisation (individual, population, community, eco-system). Experiments in ecology - their design, analysis and interpretation. Biotic interactions: competition, herbivory, predation, mutualisms. Disturbance, catastrophe and community structure and function. Behavioural ecology: innate vs learned behaviours and their effects on individual fitness, demography and community structure. Applied ecology: rehabilitation and management.

BIOL356 Marine and Terrestrial Ecology (Environmental Science) 8cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 4 hrs tutorial/practical per week.

Pre-requisites: BIOL 251, STAT 252

Assessment: Major project report and seminar, environmental report 60%; final examination 40%.

Subject Description: Lecture content as for BIOL355. Tutorial and practical components of this subject provide professional experience for Bachelor of Environmental Science students. A substantial amount of the practical work will be environmental science projects conducted in the Illawarra region.

BIOL357 Field Methods in Ecology 8cp
Not on offer in 2004

Pre-requisites: BIOL251 or equivalent

Restrictions: Do NOT enrol in this subject without first completing an application (obtainable from Dept. office), attaching a transcript of studies completed, and returning to Dept. office.

Assessment: Seminar, Project Report, Final examination

Subject Description: Techniques for estimating abundances of organisms - census, capture/recapture, indirect estimates. Shortcomings of various techniques. Radio telemetry of large vertebrates. Calculation of home range. Techniques for ecological survey and experiment in the field.

BIOL391 Advanced Biology 16cp

Autumn/ Spring Wollongong On Campus

Annual Wollongong On Campus

Contact Hours: 12 hours practical, seminars per week.

Pre-requisites: Four 200-level (distinction and above)

Co-requisites: Two 300-level

Assessment: Students will conduct 2 research projects; write 2 project reports; give 2 project seminars; write 1 general essay; and sit a written examination.

Subject Description: Two research projects are to be undertaken with different supervisors, designed and chosen in consultation with these academic staff members. Emphasis may be placed on developing competence in a range of laboratory and field techniques not already familiar to the student. Selection for Advanced Biology is based on merit, and intending students should consult the Coordinator before enrolment.

BIOL392 Advanced Biology 8cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 6 hours practical/ seminars per week.

Pre-requisites: Four 200-level (distinction and above)

Co-requisites: Two 300-level

Assessment: Students will conduct 1 research project; write 1 project report; give 1 project seminar; write 1 general essay; and sit a written examination.

Subject Description: One research project is to be undertaken, designed and chosen in consultation with an academic staff member. Emphasis may be placed on developing competence in a range of laboratory and field techniques not already familiar to the student. Selection for Advanced Biology is based on merit, and intending students should consult the Coordinator before enrolment.

BIOL401 Biology Honours 48cp

Annual Wollongong On Campus

Pre-requisites: Passing a major sequence in Biology at 300-level at a standard approved by the Head of the Department

Assessment: Essay, literature review, scientific paper, poster, seminar, thesis.

Subject Description: Students wishing to proceed to honours should consult the Honours Co-ordinator as soon as possible during their third year.

BIOL402 Biology Joint Honours 24cp

Annual Wollongong On Campus

Pre-requisites: Passing a major sequence in Biology at 300-level at a standard approved by the Head of the Department

Co-requisites: Enrolment in a 24 credit point Honours subject offered by another Academic Unit.

Subject Description: Students wishing to proceed to joint honours should consult the Honours Co-ordinator as soon as possible during their third year.

BIOL420 Cell, Protein and Antibody Technology 12cp

Autumn Wollongong On Campus

Contact Hours: 5 hours lecture, Research Project

Pre-requisites: Completion of the third year of the Bachelor of Biotechnology

Assessment: Mini-project 65%; theory exam 25%; tutorial seminar 10%.

Subject Description: The role of natural and recombinant proteins in biotechnology. Aspects of protein 3-dimensional structure and folding, ligand binding and catalysis important in biotechnology. Extraction and recovery of proteins in the biotechnology industry. Purification and characterisation of proteins. Animal cell and tissue culture: advanced culture techniques, tissue engineering and therapeutic cloning, flow cytometry and genetic engineering. Antibody technology: radio-immunoassay and enzyme-immunoassay techniques, signal amplification strategies.

BIOL421 Nucleic Acid Technology 12cp

Autumn Wollongong On Campus

Contact Hours: 5 hours lectures, Research Project.

Pre-requisites: Completion of the third year of the Bachelor of Biotechnology

Assessment: Mini-project 65%; theory exam 25%; tutorial seminar 10%.

Subject Description: Strategies for cloning of prokaryote and eukaryote genes using plasmid, cosmid, bacteriophage and transposon vector systems. Production and purification of recombinant proteins in bacterial, yeast, plant and animal systems. Plant genetic engineering. Bio-remediation and gene technology. Gene therapy. Transgenic animals. Diagnosis of human genetic disease. Ethical and social implications.

BIOL422 Biotechnology Project 24cp

Spring Wollongong On Campus

Contact Hours: Varied - Research Project.

Pre-requisites: BIOL420 and BIOL421

Assessment: Research poster 10%; final thesis 80%; final research seminar 10%.

Subject Description: Under the supervision of staff from the Department of Biological Sciences, the student will undertake a research project in the field of biotechnology and present a written report, poster and seminar on the chosen topic.

CHEM101 Chemistry IA: Introductory Physical & General Chemistry 6cp

Autumn Wollongong On Campus

Contact Hours: 26 hours lecture, 13 hours tutorial, 39 hours practical per session.

Pre-requisites: NSW HSC Examination Chemistry.

Assessment: Practical assignments, test, computer assignment, plus written examination.

Subject Description: Atomic theory and structure. Periodic Table and Chemical periodicity. Chemical bonding and shapes of molecules. Stoichiometry. Oxidation-reduction reactions. Acids and bases. Properties of gases and liquids. Thermodynamics and thermochemistry. Chemistry of the environment and radioactivity. Completion of at least a 2 Unit Science course at NSW HSC recommended. Not to count with CHEM103, CHEM104.

CHEM102 Chemistry IB: Introductory Organic & Physical Chemistry 6cp

Spring Wollongong On Campus

Contact Hours: 26 hours lectures, 13 hours tutorial, 39 hours practical per session.

Pre-requisites: NSW HSC Examination Chemistry.

Exclusions: Not to count for credit with CHEM105

Assessment: Practical assignments, test, computer assignment, plus written examination

Subject Description: Chemical equilibria and equilibrium constants. Acid-base equilibria. Electrochemistry, galvanic cells, Nernst equation and Faraday's laws. Kinetics of chemical reactions. Introductory organic chemistry. Nomenclature, preparation and reactions of alkanes, alkenes, alkynes, and arenes. Chemistry of alcohols, amines, carbonyl, and other compounds. Reaction mechanisms. Synthetic polymers. Not to count for credit with CHEM105.

CHEM103 Introductory Chemistry For Engineers 6cp

Autumn Wollongong On Campus

Summer 2004/05 Wollongong On Campus

Contact Hours: 39 hours lecture, 18 hours Tutorial/Demonstration, 21 hour practical per session.

Exclusions: Not to count for credit with CHEM101 or CHEM104

Assessment: Practical assignments, test, computer assignment, plus written examination.

Subject Description: Atomic theory, chemical bonding, structure. Simple organic molecules and reactivity. Thermodynamics and thermochemistry. Gases, liquids and solutions. Chemical basis of engineering materials such as cement, adhesives, polymers, fuels, metals and semiconductors. Environmental chemistry-pollution and pollution control. Kinetics and radiation chemistry. Not to count for credit with CHEM101 or CHEM104

CHEM104 Chemistry 1D (Introductory Chemistry) 6cp

Autumn Wollongong On Campus

Contact Hours: 39 hours lectures, 13 hour tutorials, 39 hours practical per session

Pre-requisites: Nil. Students who satisfy the HSC pre-requisites for CHEM101 and CHEM102 are not permitted to enrol.

Exclusions: Not to count for credit with CHEM101 or CHEM103

Assessment: Practical assignments, test, computer assignment, plus written examination.

Subject Description: Atomic theory and structure. Periodic Table and Chemical periodicity. Chemical bonding and shapes of molecules. Stoichiometry. Oxidation-reduction reactions. Acids and bases. Properties of gases and liquids. Thermodynamics and thermochemistry. Chemistry of the environment and radioactivity. Not to count for credit with CHEM101 or CHEM103

CHEM105 Chemistry 1E (Introductory Chemistry) 6cp

Spring Wollongong On Campus

Contact Hours: 39 hours lectures, 13 hours tutorial, 39 hours practical per session.

Pre-requisites: Nil. Students who satisfy the HSC pre-requisite for CHEM101 and CHEM102 are not permitted to enrol

Exclusions: Not to count with CHEM102

Assessment: Practical assignments, test, computer assignment, plus written examination.

Subject Description: Chemical equilibria and equilibrium constants. Acid-base equilibria. Electrochemistry P galvanic cells, Nernst equation and Faraday's laws. Kinetics of chemical reactions. Introductory organic chemistry P nomenclature, preparation and reactions of alkanes, alkenes, alkynes and arenes. Chemistry of alcohols, amines, carbonyl, and other compounds. Reaction mechanisms. Synthetic polymers. Not to count with CHEM102.

CHEM211 Inorganic Chemistry II 6cp

Autumn Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial, 39 hours practical per session.

Pre-requisites: CHEM101/104 and CHEM102/105

Assessment: Practical assignments 20% and quizzes 20%, plus written examination 60%.

Subject Description: Introduction to modern coordination chemistry; crystal field theory; magnetochemistry and u.v.-visible spectra of transition metal complexes; symmetry; bioinorganic chemistry; medicinal inorganic chemistry and toxicology.

CHEM212 Organic Chemistry II 6cp

Autumn Wollongong On Campus

Contact Hours: 26 hours lectures, 13 hours tutorials, 39 hours practical per session.

Pre-requisites: CHEM101 and CHEM104 OR CHEM 102 and CHEM105.

Assessment: Practical assignments 20%, quizzes 10%, assignments 15% and written examination 55%.

Subject Description: Modern organic synthetic methods, theory and practice. This includes: an introduction to organic chemical stereochemistry; fundamentals of molecular mechanism; synthetic transformations of organic molecular moieties; applications of spectroscopy.

CHEM213 Molecular Structure, Reactivity and Change 6cp

Spring Wollongong On Campus

Contact Hours: 39 hours lectures & tutorials, 39 hours practical per session

Pre-requisites: CHEM101/ CHEM104 and CHEM102/ CHEM105 & Faculty of Science minimum mathematics requirement

Assessment: Practical, mid-session quiz plus written examination.

Subject Description: When looking at chemical systems, three fundamental questions arise : to what extent will they react, how quickly will they react and what is their structure? This subject explores these topics through the key topics of thermodynamics and kinetics and provides an understanding of experimental studies and their relationship to theory. These macroscopically observed properties are then discussed in relation to fundamental molecular properties, including an introduction to simple quantum concepts and the rotational/vibrational spectroscopy of diatomic molecules. In addition, colloidal systems, including micellar phases, are used as examples of molecular self-assembly, where intrinsically unstable phases are maintained by kinetic factors.

CHEM214 Analytical and Environmental Chemistry 6cp

Spring Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Prerequisites: CHEM101/CHEM104 and CHEM102/CHEM105 or CHEM103 & Faculty of Science minimum mathematics requirement

Assessment: Practical assignments 30%, Tutorial assignments 15%, and written examination 55%.

Subject Description: This subject is an introduction to analytical chemistry and its application to environmental and biological systems. It provides an excellent introduction to the separation and quantification of various compounds through the application of a range of current analytical techniques. It will provide an understanding of sample compositions, sample preparation and analysis, and data interpretation using

statistics. The material will be presented in lectures, workshops, and laboratory exercises.

CHEM215 Food Chemistry 6cp

Autumn Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial , 18 hours practicals per session.

Pre-requisites: CHEM101/CHEM104 and CHEM102/CHEM105

Assessment: Practical assignments 20%, quiz 20%, written examination 50%, essay 10%.

Subject Description: Only listed in the Health & Behavioural Sciences Schedule. This subject is designed as a core subject in the BSc (Nutrition) program. Description: Types of nutrients, energy value of food. Fats, carbohydrates, and proteins in foods. Colloidal systems. Essential trace elements, vitamins. Cooking, preservation and processing of food. Chemical additives and toxins in food.

CHEM218 Special Chemistry Studies 6cp

Autumn/ Spring Wollongong On Campus

Contact Hours: 6 hours Lab session etc per week.

Pre-requisites: Entry restricted to BSc(Hons) Adv. Candidates.

Assessment: Written report on student's project.

Subject Description: This subject will involve the study of specific research areas of chemistry under the guidance of a member of staff. This study may include research assistance, directed reading, computer-based studies, and library assignments.

CHEM301 Advanced Materials and Nanotechnology 8cp

Spring Wollongong On Campus

Contact Hours: 3 hrs lecture/tutorial and 3 hrs practical per week.

Prerequisites: CHEM211

Assessment: Exam 60%, Literature Assignment 10%, Practical Work 30%

Subject Description: Nanotechnology is the design and fabrication of functional materials at the molecular level. It is one of the fastest growing areas of scientific research, spanning chemistry, physics, biology and materials science. This subject provides an introduction to polymers, ceramics, carbon nanotubes and other advanced materials that are the building blocks of nanotechnology. It also explores how supramolecular chemistry is used to synthesise assemblies of molecules for applications including sensing, catalysis, artificial photosynthesis and molecular electronics

CHEM314 Instrumental Analysis 8cp

Autumn Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial , 39 hours practical.

Pre-requisites: CHEM214

Assessment: Coursework (including practical work), quiz and final written exam.

Subject Description: The principles underlying common instrumental methods will be discussed in lectures, specifically instrument development and components,

Subject Descriptions

operation and application, and their advantages and limitations. The accompanying laboratory course provides an opportunity for hands-on experience.

CHEM320 Bioinformatics: From Genome to Structure 8cp

Spring Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Pre-requisites: BIOL213

Exclusions: Not to count with BIOL318

Assessment: Practical work 35%, quiz 10%, and final written examination 55%.

Subject Description: The course will be divided into three strands of approximately equal length: bioinformatics; biological macromolecules (proteins and nucleic acids) - structure and function; proteomics. In the practical course, bioinformatics will be explored in computer-based tutorials and practicals. Databases for nucleic acid and protein sequences, structures and other parameters of biological molecules, plus linkages to the scientific literature, will be used to extract information and to compare and analyse these data. Proteomics and protein and nucleic acid structure will also be investigated via computer-based practicals. In the laboratory, the sequence of a dipeptide will be determined and structure/function aspects of the protein, lysozyme, will be analysed.

CHEM321 Organic Synthesis and Reactivity 8cp

Spring Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Pre-requisites: CHEM212

Assessment: Practical 20%, 3 assignments 15%, quizzes 15%, written examination 50%.

Subject Description: Reactive intermediates: free radicals, carbenes, arenes: generation, determination, reactions. Stereochemistry: physical detection of stereochemistry by n.m.r., C.D. etc; enantioselective synthesis and computer modelling. Synthesis: carbocyclic synthesis and theory and applications to natural product synthesis. Heterocycles: synthesis, reactions and applications of common heterocycles.

CHEM327 Environmental Chemistry 8cp

Autumn Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Pre-requisites: CHEM214

Assessment: Literature review/laboratory report 40%, written examination 50%, quiz 10%

Subject Description: The environment depends on complex interactions of chemical, physical and biological processes. These can be both natural and anthropogenic in origin. In this course the chemical aspects are highlighted in three strands: atmospheric chemistry, aquatic chemistry and soil chemistry. The subject also investigates methods for measuring and monitoring the chemical state of the environment.

CHEM330 Medicinal Chemistry 8cp

Spring Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial, 39 hours practical.

Pre-requisites: CHEM212 and BIOL214 and BMS202. Entry restricted to BMedChem candidates.

Assessment: Final examination 55%, practical work 20%, laboratory mini project 5%, literature assignment 5% and seminar based on assignment 5%, quiz 10%.

Subject Description: The concepts, principles and applications of medicinal chemistry are examined and include: drug lead discovery, investigation into the key molecular features necessary for medicinal action, drug metabolism, stereochemistry/chirality and drug action, modern methods in drug design including computer-aided molecular modelling. This course also has guest lecturers who are experts in the varying fields of medicinal chemistry. This could include speakers from pharmaceutical companies or from research institutes.

CHEM340 Chemistry Laboratory Project 8cp

Autumn/ Spring Wollongong On Campus

Summer 2004/05 Wollongong On Campus

Contact Hours: 6 hour per week plus seminars etc.

Pre-requisites: Four 200-level Chemistry subjects. Restricted entry. Admission by application to Head of Department of Chemistry

Co-requisites: Two 300-level Chemistry subjects

Assessment: Report on project and literature review 80%. Seminar on project 20%.

Subject Description: Research projects are undertaken under the direct guidance of an academic supervisor, chosen after consultation with academic staff and the Head of Department. The projects will introduce students to a range of advanced experimental techniques, and familiarise them with the scientific approach to research. Students must attend Departmental seminars. Selection for this laboratory project is based on merit, and intending students should consult with the Head before enrolment.

CHEM350 Principles of Pharmacology 8cp

Autumn Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Pre-requisites: CHEM212 or BIOL214 and BMS202. CHEM350 is normally restricted to BMedChem candidates. Other students should contact the co-ordinator.

Assessment: Practical 20%, library assignment and seminar 20%, written examination and test 60%.

Subject Description: This course is designed to introduce students to the basic concepts of pharmacology. Topics covered will include, receptors and molecular basis of drug action, drug disposition and bioavailability, kinetics of drug action, factors affecting drug activity, in vitro and in vivo screening procedures, pharmacology of prototype drugs, and drug interactions.

CHEM364 Molecular Structure and Spectroscopy 8cp

Autumn Wollongong On Campus

Contact Hours: 39 hours lecture & tutorial , 39 hours practical per session.

Pre-requisites: CHEM213

Assessment: Written final examination 60%, practical & tutorial assignments 30%, mid-session quiz 10%.

Subject Description: Spectroscopy in its many forms is one of the most important tools we have for both molecular structure determinations and in quantitative chemical analysis. This multi-faceted course covers the fundamentals and many uses of spectroscopy for molecular structure determination and analysis.

It includes optical (infrared, visible and ultraviolet), mass and nuclear magnetic resonance (NMR) spectroscopy and a formal treatment of molecular symmetry. Applications to organic, inorganic, biological and gas-phase systems are covered.

CHEM401 Chemistry Honours 48cp

Annual Wollongong On Campus

Pre-requisites: Normally at least 32 credit points of 300-level Chemistry subjects at an appropriate standard (credit average). Not to count with CHEM402 or 403, 422.

Assessment: Coursework (10%); Research project, thesis and seminars (90%)

Subject Description: Coursework: advanced topics and skills for chemistry research including oral and written communication, project management, library techniques and OH&S. Research Project: each year, available projects are provided by the Department of Chemistry. See Co-ordinator or Head of Department.

CHEM402 Chemistry Honours - Part I (for part-time students) 24cp

Annual Wollongong On Campus

Pre-requisites: Normally 32 credit points of 300-level Chemistry subjects at an appropriate standard. Not to count with CHEM401.

Assessment: Coursework (15%); research project, thesis and seminars (85%).

Subject Description: Coursework: advanced topics and skills for chemistry research including oral and written communication, project management, library techniques and OH&S. Research Project: each year, available projects are provided by the Department of Chemistry. See Co-ordinator or Head of Department

CHEM403 Chemistry Honours - Part 2 (for part-time students) 24cp

Annual Wollongong On Campus

Pre-requisites: Normally 32 credit points of 300-level Chemistry subjects at an appropriate standard. Not to count with CHEM401

Assessment: Coursework (10%); Research project, thesis and seminars (90%)

Subject Description: Coursework: advanced topics and skills for chemistry research including oral and written communication, project management, library techniques and OH&S. Research Project: each year, available projects are provided by the Department of Chemistry. See Co-ordinator or Head of Department

CHEM405 Chemistry Joint Honours 24cp

Annual Wollongong On Campus

Pre-requisites: Normally 24 credit points of 300-level Chemistry subjects at an appropriate standard. Entry is subject to the approval of the Head of Department of Chemistry. This subject is taken with 24 credit points at 400-level from another Department.

Assessment: Coursework (10%); Research project, thesis and seminars (90%)

Subject Description: A list of topics available will be provided by the Department. See Co-ordinator or Head of Department.

CHEM430 Selected Topics in Medicinal Chemistry 12cp

Annual Wollongong On Campus

Contact Hours: 56 hours lectures & tutorials per session.

Pre-requisites: CHEM330. Entry restricted to BMedChem candidates.

Assessment: Written examinations 60%, literature assignments 10%, project essay 20%, seminar 10%.

Subject Description: Specialist courses in aspects of medicinal chemistry and related areas. Topics will include: structure-based ligand design (including computer-aided drug design); structure-pharmacological property relationships; synthesis and applications of radiopharmaceuticals; drug stability and formulation; toxicology and metabolism; advanced synthetic chemistry (including asymmetric synthesis and chiral drugs); bioactive natural products and drug development (including medicinal plant studies).

CHEM431 Selected Topics in Medicinal Chemistry Part 1 6cp

Spring Wollongong On Campus

Contact Hours: 28 hours lectures & tutorials per session.

Pre-requisites: CHEM330. Entry restricted to BMedChem candidates who commence BMedChem(Hons) mid-year.

Assessment: Written examinations 60%, literature assignments 10%, project essay 20%, seminar 10%.

Subject Description: Specialist courses in aspects of medicinal chemistry and related areas. Topics will include: structure-based ligand design (including computer-aided drug design); structure-pharmacological property relationships; synthesis and applications of radiopharmaceuticals; drug stability and formulation; toxicology and metabolism; advanced synthetic chemistry (including asymmetric synthesis and chiral drugs); bioactive natural products and drug development (including medicinal plant studies).

CHEM432 Selected Topics in Medicinal Chemistry Part 2 6cp

Autumn Wollongong On Campus

Contact Hours: 28 hours lectures & tutorials.

Pre-requisites: CHEM330. Entry restricted to BMedChem candidates.

Assessment: Written examinations 60%, literature assignments 10%, project essay 20%

Subject Description: Specialist courses in aspects of medicinal chemistry and related areas. Topics will include: structure-based ligand design (including computer-aided drug design); structure-pharmacological property relationships; synthesis and applications of radiopharmaceuticals; drug

stability and formulation; toxicology and metabolism; advanced synthetic chemistry (including asymmetric synthesis and chiral drugs); bioactive natural products and drug development (including medicinal plant studies).

CHEM450 Medicinal Chemistry Project 28cp

Annual Wollongong On Campus

Spring04/Summer05 Wollongong On Campus

Pre-requisites: CHEM330 and CHEM350. Entry restricted to BMedChem candidates.

Assessment: Based on a research project thesis 90% and research seminar 10%

Subject Description: A list of research projects in medicinal chemistry available for study in any one year will be provided by the Department of Chemistry. The development of appropriate joint projects within or outside the University is actively encouraged.

CHEM451 Medicinal Chemistry Project Part 1 14cp

Spring Wollongong On Campus

Pre-requisites: CHEM330 and CHEM350. Entry restricted to BMedChem candidates.

Assessment: Based on research project thesis 90% and research seminar 10%

Subject Description: Research project in medicinal chemistry. For students commencing BMedChem research project in Session 2.

CHEM452 Medicinal Chemistry Project Part 2 14cp

Autumn Wollongong On Campus

Pre-requisites: CHEM330, CHEM350 and CHEM451. Entry restricted to BMedChem candidates.

Assessment: Based on a research project thesis 90% and research seminar 10%

Subject Description: Research project in medicinal chemistry.

EESC101 Planet Earth 6cp

Autumn Wollongong On Campus

Autumn Loftus On Campus

Contact Hours: 2 x 1hr lecture, 3 hrs practical per week.

Assessment: 3 x short practical tests 15%, multiple-choice tests 10%, field tutorial test 5%, practical examination 35%, theory examination 35%

Subject Description: How does the solid planet Earth function and of what does it consist? This subject provides an introduction to earth sciences by considering topics such as geological time, the solar system; the interior of Earth; tectonics and structural geology; crystals; minerals; volcanoes and volcanic processes; and characteristics of igneous, sedimentary and metamorphic rocks.

EESC102 Earth Environments and Resources 6cp

Spring Wollongong On Campus

Spring Loftus On Campus

Contact Hours: 2 x 1hr lectures, 3hr practical per week and 1 day field tutorial.

Prerequisites: Prior completion of EESC101 is recommended

Assessment: Short practical Test 10%, Multiple choice tests 20%, Field Tutorial Test 5%, Practical Examination 25%, Theory Exam 40%

Subject Description: The frequent conflicts between resource utilisation and its environmental consequences are of major concern in modern societies. This subject considers the implications and environmental and geological aspects of resource utilisation on Earth. Topics include economic geology: gold, metals, water, coal, oil and gas; industrial minerals; geophysical exploration; mining and resources; sedimentary processes, products and environments of deposition; fossils and palaeoecology.

EESC103 Landscape change and Climatology 6cp

Autumn Wollongong On Campus

Contact Hours: 2 x 1hr lecture, 3 hrs practical per week.

Assessment: 1 examination, 2 essays, practical work

Subject Description: This subject examines the physical geography of our planet including the character of the oceans and their interaction with the land masses, the behaviour of the atmosphere, world-wide weather and climatic patterns, climatic change, major distributions of soil and biota, and the Earth's landforms. The latter includes information on weathering, theories of landform evolution, hillslope processes, glaciation, hydrology, river and coastal processes, and deserts. Laboratory classes concentrate on map and air photograph interpretation.

EESC104 The Human Environment: Problems and Change 6cp

Spring Wollongong On Campus

Spring Shoalhaven On Campus

Spring Batemans Bay On Campus

Spring Bega/ Moss Vale On Campus

Contact Hours: 2 x 1hr Lectures, 2 hr practical per week.

Assessment: Mid-term exam 25%, final exam 25%, 5 practicals each worth 10%

Subject Description: This subject introduces students to the central themes of human geography. The themes introduced in this subject include cultural, tourism, social, population and development geographies. A number of questions are examined to introduce these themes. These questions include those that investigate cultures of nations, national identities, international migration, mechanisms of world population growth and global inequalities. Through introducing these themes this subject aims to increase awareness and understanding of the relationships between the environment and culture, tourism, population and economic growth. Practical classes introduce students to a range of analytical techniques used in human geography. These techniques including deconstruction, content analysis and participant observation are applied to a range of subject-relevant problems.

EESC201 Earth Surface Processes and Products 6cp

Autumn Wollongong On Campus

Contact Hours: 2hrs lecture, 3 hrs lab class per week and 2 days field work.

Prerequisites: 12 credit points of 100-level GEOS or EESC subjects

Assessment: Macrofossil Exercise 1 10%, Macrofossil Exercise 2 10%, Seminar Presentation 5%, Sydney Basin Field report 25%, multiple choice quizzes 10% Theory Exam 40%

Subject Description: This subject provides an overview of volcanology, marine sediments, sedimentary environments and fossils using local field examples as a teaching platform. Topics include: styles and mechanisms of volcanic eruptions; distribution and characteristic features of erupted volcanic products; clastic high and low-energy shelf sediments; evaporates; reefs and cool water carbonates; deep ocean sediments; marine transport mechanisms; major marine invertebrate groups and their fossil records; palaeoecology; and application of stable isotopes in marine environments.

EESC202 Soils, Landscapes and Hydrology 6cp

Spring Wollongong On Campus

Contact Hours: 2 x 1hr lectures, 2 hrs practical per week.

Prerequisites: 12 credit points of 100-level EESC or GEOS subjects.

Assessment: Essays/field/practical assignments; final examination

Subject Description: The interdependence of landform, hydrology and soil, together with time and place, are the major factors influencing landscape evolution. This subject examines denudation of highlands; survival of ancient landscapes; climatic and geomorphic controls on landforms; erosion; weathering processes and the formation of soils; desert dunes, laterites, silcretes and calcretes; soil surveying; environmental records of lakes; groundwater and surface-water processes and chemistry; dating of land-surfaces and groundwater; the hydrological cycle.

EESC203 Biogeography and Environmental Change 6cp

Autumn Wollongong On Campus

Contact Hours: 2hrs lecture, 3 hrs practical per week.

Prerequisites: EESC103 or BIOL104 or GEOS112

Assessment: Essay 20%, practical/field reports 40%, Final Examination 40%

Subject Description: The present environment of Australia is the legacy of interactions between geological, biological and hydrological processes and human impacts. This subject links the biogeographical study of the distribution of plants and animals and their interaction with the physical environment to long-term environmental change. Set within the context of long-term geological and climate change, topics include: the origins of Australian flora and fauna, the impact of long-term climatic change, anthropogenic effects on biota, and the impact of fire. Modern techniques used to reconstruct ecosystems and climates, map vegetation and human impact, and to analyse vegetation data are presented.

EESC204 Introductory Spatial Science 6cp

Spring Wollongong On Campus

Contact Hours: 2 hrs lecture, 3 hrs practical per week.

Prerequisites: At least 30cp of 100 level subjects normally including EESC103 or GEOS112

Assessment: Practical work 35%, Online quiz 10%, written assignment 15%, Final examination 40%

Subject Description: This subject provides students with a comprehensive introduction to geospatial technologies. Students develop basic technical skills that can be used to support a wide variety of disciplinary work. Attention is focused on the applied aspects of spatial data acquisition, collection, processing and mapping. Students will become skilled in commonly used procedures such as air photo interpretation and mapping, GIS data input and manipulation, the enhancement of multi-spectral data and will obtain hands-on experience with a variety of forms of spatial data.

EESC205 Population Studies 6cp

Autumn Wollongong On Campus

Contact Hours: 2 hrs lecture/tutorial, 3 hrs workshops.

Prerequisites: 12 credit points of 100-level GEOS or EESC subjects

Assessment: Exam, seminar presentation, tutorial papers

Subject Description: This subject is designed to introduce students to a range of demographic issues that are globally, nationally and regionally/locally significant. The lecture content is designed to enable students to critically study how geographers analyse population issues and how this analysis overlaps with other disciplines. The objective is that students will learn skills in handling data, critical thinking, group work and presentation skills.

EESC206 Discovering Downunder: a Geography of Australia 6cp

Spring Wollongong On Campus

Contact Hours: 2 x 1hr lectures, 2hr practical per week.

Prerequisites: 12 credit points of any 100-level subjects

Assessment: Critical analysis 10%, Tutorial Participation 20% (4 tutorials @ 5%), Census assignment 30%, Final Exam 40%

Subject Description: This is a broad yet coherent overview of the physical and human environments of contemporary Australia. How did Uluru and the Great Barrier Reef form? Why is Sydney particularly vulnerable to bushfires? Which is the most multicultural Australian city? Where is the Back of Bourke? Within individual topics we emphasise the importance of spatial and temporal scale, interactions between people and the environment, and key research questions. Topics include landforms; climate; vegetation; coasts; rivers and deserts; indigenous Australia; population; industry and agriculture; cities, suburbs and rural settlement; and interactions with Australia's near neighbours.

EESC208 Environmental Impact of Societies 6cp

Spring Wollongong On Campus

Contact Hours: 2 x 1hr lectures, 3hrs practical per week.

Prerequisites: 12 credit points of any 100-level subjects

Assessment: major assignments, presentation, assessment, theory exam

Subject Description: Humans have been transforming the Earth for many thousands of years. This subject provides an overview of those long term impacts as a context for better understanding contemporary environmental concerns. Topics include: global environmental issues, atmospheric and aquatic pollution, the biological ramifications of contamination, post-European impacts in Australia (vegetation changes, species extinction, land clearance, salinity). The environmental impacts of mining and of cities and urban expansion will be outlined. Students will be introduced to the practical techniques of Environmental Impact Assessment.

EESC210 Social Spaces: Rural and Urban 6cp**Spring** Wollongong On Campus**Spring** Shoalhaven On Campus**Spring** Batemans Bay On Campus**Spring** Bega/ Moss Vale On Campus**Contact Hours:** 2hrs lecture/workshop, 2hrs practical per week.**Prerequisites:** 12 credit points of any 100-level subjects**Assessment:** Exam 40%, Census analysis assignment 30%, Critical Analysis Exercise 10%, workshops 20%

Subject Description: This subject examines the global and national processes that shape the social, economic and spatial characteristics of Australian cities and regions. Students will study issues such as urbanisation, economic restructuring, population dynamics, and urban and regional policy to explore how contemporary urban and rural landscapes have been formed and how they are being constantly reshaped. Recent examples, such as dairy industry restructuring and the development of Sydney, will be used to make connections between these broader influences and specific aspects of Australian urban and rural life. Through workshops and assignments, students will develop practical skills and knowledge in areas such as media analysis and the use of census and other data sources.

EESC250 Field Geology 6cp**Summer 2004/05** Wollongong Flexible**Contact Hours:** Not available**Prerequisites:** GEOS111 or EESC101, or satisfactory progress in EESC102**Assessment:** Field exercises (55%), Field attitude and competence (10%), Field report (35%)

Subject Description: The subject is taught and assessed on the basis of work completed during a 12 day field tutorial to view, describe and interpret well-exposed, coastal, rock sequences on the south coast of New South Wales. A variety of techniques will be used for measurement of stratigraphic sections, description and interpretation of geological structures, detailed sedimentary and volcanic facies assessment, and the organisation and production of geological maps, field mapping exercises and reports.

EESC252 Geology for Engineers I 6cp**Spring** Wollongong On Campus**Spring** Shoalhaven On Campus**Contact Hours:** 2 x 1hr lectures, 3hr practical per week.**Restrictions:** This subject is restricted to students enrolled in a Bachelor of Engineering degree.**Exclusions:** Not to count for credit with: GEOS251, GEOS111, GEOS102, EESC101, EESC102**Assessment:** Field Tutorial tests (2) 20%, Mid-session practical test 15%, Practical examination 25%, Theory examination 40%

Subject Description: This subject provides an introduction to geology applied to engineering. Topics include rock-forming minerals; petrology and physical properties of igneous, sedimentary and metamorphic rocks; weathering and erosion; basic geological structures and identification of unstable rock masses; geological mapping and three-point problems; geological controls on groundwater flow and chemistry; geophysics; site investigations; relationship between geology

and various engineering works such as excavations, tunnels, dams and foundations.

EESC254 Geology for Engineers II 6cp**Not on offer in 2004.****Restrictions:** This subject is restricted to students enrolled in a Bachelor of Engineering degree.**Exclusions:** Not to count for credit with: GEOS252, GEOS111, GEOS102, EESC101, EESC102**Assessment:** class assessment including one or more of class tests, assignments, field reports, practical examination 50% and theory examination 50%

Subject Description: GEOS252 builds on the concepts given in GEOS251 as well as reviewing mining geology. Topics include geological problems related to resource calculations; ore minerals; ore deposit genesis and implications for mining resulting from the geology of the deposits; geological basis for environmental problems; geology and mine site rehabilitation; coal formation and coal geology; geology of coal seam gas; geophysical techniques applied to mining; relevant case studies.

EESC260 Earth and Environmental Research Project Sciences 6cp**Spring** Wollongong On Campus**Contact Hours:****Prerequisites:** 12 credit points of 100-Level GEOS or EESC subjects. Enrolment in BSc(Advanced) degree**Exclusions:** Not to count with GEOS292**Assessment:** project report 70%, literature review presentations/seminars/examinations 30%

Subject Description: This subject involves the study of specific research topics in Geosciences under the guidance of a member of staff. The study may include research assistance, directed reading, computer-based studies, library assignments. Emphasis will be placed on the appropriate design and execution of field or laboratory experiments and/or studies involving the analysis and interpretation of data. Students will develop skills in the acquisition and presentation of data in verbal and written form.

EESC300 Directed Studies in Earth and Environmental Sciences A 8cp**Autumn/ Spring** Wollongong On Campus**Contact Hours:****Prerequisites:** Restricted Entry. Admission by application to Head of School of Earth and Environmental Sciences**Assessment:** seminar presentation, essays, research report

Subject Description: This subject consists of directed reading, field and laboratory work (as required) and writing leading to the production of a major research essay/project report or reports in a field selected by the student and approved by the Supervisor.

EESC301 Plate Tectonics, Macrotopography and Earth History 8cp**Autumn** Wollongong On Campus**Contact Hours:** 2hr lecture, tutorials/practicals up to 2 hrs per week, 5 days field work.**Prerequisites:** 12 cp of 200-level EESC or GEOS subjects, normally including either EESC201 or EESC202

Assessment: Assignment and seminar 20%, Field trip report 1 15%, Field trip report 2 15%, Final examination 50%

Subject Description: This subject outlines the theory of plate tectonics and evaluates its role as the dominant control of macrotopography on Earth. Large-scale long-term and short-term processes that control landforms and bathymetry are examined in relation to plate boundaries, ocean basins, continental margins, continental interiors and sedimentary basins. Earth structure is examined along with earthquakes and deformation (stress, strain, faulting and folding). Aspects of Earth history are considered in relation to past mountain belts, continents and oceans. Practicals are a series of tutorials designed to reinforce the material covered in lectures. Field work consists of two field trips.

EESC302 Coastal Environments: Process and Management 8cp

Spring Wollongong On Campus

Contact Hours:

Prerequisites: 12 cps from GEOS214, GEOS217, GEOS220, GEOS222, GEOS231, GEOS234 and GEOS239

Assessment: essays, practical/field reports, final examination

Subject Description: This subject examines sedimentary and ecological processes on the coast and explores coastal management issues in the context of these processes. Topics include the morphology, evolution and morphodynamics of coastal landforms, particularly beaches, estuaries, deltas, coastal barriers, dunes and coral reefs. The role of different wave regimes, tectonic processes, sea-level change and extreme events in shaping the coast is examined.

EESC303 Fluvial Geomorphology, Sedimentology 8cp

Autumn Wollongong On Campus

Contact Hours: 3 x 1hr lectures, 3hrs practical per week.

Prerequisites: 18 cps of 200 level GEOS or EESC subjects normally including EESC201 and EESC202

Assessment: Essay 10%, Bundeena Field trip report 10%, Scarborough field trip report 10%, Kangaroo Valley-Shoalhaven field trip report 20%, Local creeks report 10%, Final examination 40%

Subject Description: Rivers play a dynamic role in shaping the Earth's landforms (geomorphology), constructing sedimentary sequences of economic importance (sedimentology), and presenting flood and erosion hazards, all of which greatly influence human use of the Earth's surface. This subject examines processes forming and modifying contemporary drainage basins, interprets fluvial sedimentary records and relates changes in these records to variations in climate and depositional environment. Particular attention is given to human modification and the management of river systems.

EESC304 Geographic Information Science 8cp

Spring Wollongong On Campus

Contact Hours: 2 x 1hr lectures, 3hr practical per week.

Prerequisites: 18 credit points of 200-Level GEOS or EESC subjects

Assessment: Practicals, minor assignment, short test, major assignment, final exam.

Subject Description: Geographical Information Science is concerned with the theory and analysis of spatial data, particularly using GIS. GIS can be used to model past and

future scenarios, such as the effects of climate change, population growth or bushfire distribution. This course examines the principles of GIS, with an emphasis on natural resource management. It covers data acquisition, spatial databases, vector and raster systems, georeferencing, digital terrain modelling, analysis of errors and accuracy standards, and applications of GIS.

EESC305 Remote Sensing of the Environment 8cp

Autumn Wollongong On Campus

Contact Hours: 2 x 1hr lectures, 3hr practical per week.

Prerequisites: 18cp of 200 level GEOS or EESC subjects

Assessment: RSCAL modules (5%) Short Answer Theory Test (15%) Practical Test (15%) Project report (25%) Final Exam (40%)

Subject Description: This subject introduces the principles and techniques for identifying and mapping environmental features using images obtained from satellites and aircraft. Satellite imagery from Landsat 7 ETM, SPOT, and EO-1 Hyperion, in addition to airborne hyperspectral imagery from Hymap and CASI will be examined. Case studies will be used to illustrate the multidisciplinary scope of remote sensing. Topics include environmental monitoring, vegetation analysis, geological exploration and urban planning. Practical work involves the development of interpretation skills as well as computer-based digital analysis.

EESC306 Resources and Environments 8cp

Spring Wollongong On Campus

Contact Hours: 2hrs lectures, 4 hrs laboratory per week and 4-5 days field work.

Prerequisites: 12cp of 200-level EESC or GEOS subjects, normally including either EESC201 or EESC202

Assessment: Written examination 40%, Seminar 10%, Class exercises 20%, Assignments 30%

Subject Description: This subject covers the major concepts in metalliferous deposits and coal resources. Topics include the types and genesis of ore in igneous, metamorphic and sedimentary rocks, the formation and properties of coal, assessment of coal rank and type. The applications of geochemical methods and geophysical methods such as seismic, magnetic, gravity electrical and radiometric to the discovery and evaluation of deposits will be introduced. Professional matters such as the calculation of reserves, code of ethics and mining techniques will be introduced.

EESC307 Spaces, Places and Identities 8cp

Autumn Wollongong On Campus

Contact Hours: 2hr lecture/tutorial, 3hr workshop per week.

Prerequisites: 12cp of any 200-level subjects

Assessment: Exam 40%, Seminar Presentation 20%, Research Report 20%, Interview Transcript 10%, Literature Review 10%

Subject Description: The lecture content is designed to enable students to critically study how geographers have conceptualised space/place. Different geographical approaches will be introduced in this subject that investigate the connections that have been made between place making processes and identity. Drawing on case studies, the relationships between place and identity will be explored in

the context of places of the nation, resistance, pleasure and fantasy. Underpinning the design of workshops is the objective that students will learn skills to transfer into their career paths. Proficiency in three areas is concentrated upon in the subject: qualitative research, team-work and presentation skills. Employers often seek graduates with demonstrated skills in team-work, critical thinking, oral communication and report writing. This subject is designed to enable students to develop these skills.

EESC308 Environmental and Heritage Management 8cp

Spring Wollongong On Campus

Contact Hours: 2 x 1hr lectures, 3 hr practical per week.

Prerequisites: 12cp of 200-level EESC or GEOS subjects

Assessment: Essay 20%, Practical reports 20%, Research report 20%, Final examination 40%

Subject Description: This subject presents geographic perspectives on environmental and heritage management. We examine environmental and cultural values and how they are translated into practice to protect and manage landscapes, places, resources and ecosystems. Consequently, the subject will consider definitions of concepts such as environment, nature and heritage as well as legislative and policy frameworks in Australia and overseas. These themes will be pursued through studies of issues such as indigenous land and heritage management, wilderness identification and management, catchment management and restoration of ecosystems and the built environment. The subject is relevant for students specialising in any of the EESC strands.

EESC350 Directed Studies in Earth and Environmental Sciences B 8cp

Autumn/ Spring Wollongong On Campus

Contact Hours:

Prerequisites: Restricted entry. Admission by application to Head of School of Earth and Environmental Sciences

Assessment: seminar presentations, essays, research reports

Subject Description: This subject consists of directed reading, field and laboratory work (as required) and writing leading to the production of a major research essay/project report or reports in a field selected by the student and approved by the Supervisor.

EESC401 Earth and Environmental Sciences Honours 48cp

Annual Wollongong On Campus

Prerequisites: Entry restricted to students who have completed a Geos or EESC major with a credit average in the area of specialisation.

Assessment: based upon thesis examination

Subject Description: Final-year Honours students are required to write a thesis of approximately 20-25,000 words on an approved topic embodying the results of a piece of supervised research and to participate in a seminar program.

EESC402 Geosciences Joint Honours 24cp

Annual Wollongong On Campus

Prerequisites: Joint Honours candidates must have satisfied the requirements for admission to Honours in both disciplines.

Assessment: seminar papers, examinations, thesis

Subject Description: Students enrolling in this subject must: (1) have completed a program meeting the requirements for admission to Honours in Geosciences and a cognate discipline; (2) write a thesis on a topic acceptable to and supervised by each academic unit; (3) complete such course work as shall be determined by the Chairperson of each academic unit.

EESC403 Geoinformatics Honours 36cp

Annual Wollongong On Campus

Prerequisites: Completion of 144cp of BComp Geoinformatic degree, with WAM greater than or equal to 67.5

Assessment: Research Project thesis (100%)

Subject Description: The subject consists of a research project supervised by an academic in the School of Geosciences or School of Information Technology and Computer Science, in the area of Geographic Information Systems analysis, spatial information technology or computer programming related to spatial analysis. The research project is presented as a thesis that is both internally and externally assessed. As much as possible projects will be linked to topics of interest to government, independent agencies or industry.

ENVI391 Environmental Science 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture, 1 hour tutorial, 3 hours practical per week.

Pre-requisites: Enrolment in BSc (Environment) and completion of BIOL251, CHEM214 and GEOS222

Exclusions: Not to be counted with ENVI491

Assessment: Assignments 25%; major project report 35%; final examination 40%.

Subject Description: This subject builds on the interdisciplinary knowledge gained through the first and second year BSc(Environment) program. Focus is on interactions between biological, chemical, geological and geographical factors and processes in major ecosystems including coral reefs, coasts, estuaries, rivers, lakes, alpine, forests, and grasslands. Existing and potential impacts that influence environmental management will also be investigated such as water and waste management, climate change, population growth, and social and political factors.

ENVI403 Research Report 24cp

Annual Wollongong On Campus

Pre-requisites: Enrolled in final year of BEnvSc.

Assessment: Major report 100%.

Subject Description: A research project for an organisation involved with solving environmental problems will be allocated to candidates in consultation with the Head of Environmental Science.

ENVI491 Environmental Science and Systems 8cp

Spring Wollongong On Campus

Contact Hours: 2 hours lecture, 1 hour tutorial 3 hours practical per week.

Pre-requisites: Enrolment in BEnvSc and completion of BIOL251, CHEM214, GEOS222 and GEOS214

Exclusions: Not to be counted with ENVI391

Assessment: Assignments 25%; major project report 35%; final examination 40%.

Subject Description: This subject builds on the interdisciplinary knowledge gained through the first and second year BEnvSc program. Focus is on interactions between biological, chemical, geological and geographical factors and processes in major ecosystems including coral reefs, coasts, estuaries, rivers, lakes, alpine, forests, and grasslands. Existing and potential impacts that influence environmental management will also be investigated such as water and waste management, climate change, population growth, and social and political factors.

MARE200 Introduction to Oceanography 6cp

Autumn Wollongong On Campus

Contact Hours: 2 x 1hr lecture, 1 hr tutorial, 3 hr practical per week.

Pre-requisites: GEOS102, GEOS112, BIOL103, BIOL104, CHEM101/104, CHEM102/105

Assessment: Biology Practical Report 15%, Geosciences Essay 15%, Chemistry Practical Report 10%, Final Examination 60%

Subject Description: This subject forms a basic introduction to oceanography. Topics covered include physical attributes of oceans; circulation and currents; tides and waves; marine organisms and biodiversity; environmental controls on organisms; processes of transport and behaviour of organisms in their life cycles; food webs and nutrient cycling; chemistry of seawater; sources and sinks of chemicals; carbon and carbonate cycles, chemical reactions in seawater, chemical exchange with sediments, stable isotopes and climate change.

MARE300 Fisheries & Aquaculture 8cp

Spring Wollongong On Campus

Contact Hours: 6 hours per week.

Prerequisites: STAT252 and (BIOL351) or (BIOL355)

Assessment: Examination (60%); Literature review (20%); Project Report & Lab reports (20%)

Subject Description: This subject will provide an overview of fisheries biology and aquaculture (vertebrate and invertebrate) including: the diversity of Australian and international fisheries and their key challenges; relevant ecological issues (population dynamics, transport processes, stock identification); predictive modelling, fisheries management; secondary impacts of fisheries; the diversity of aquaculture; case studies in aquaculture; ecological impacts, potential for enhancement of fisheries.

MARE357 Advances in Molluscan Biology 8cp

Summer 2004/05 Wollongong On Campus

Contact Hours: 10 hours lecture/tutorial per week for 2 weeks; 20 hours practical & field excursions per week for 2 weeks

Pre-requisites: BIOL241 (or equivalent)

Assessment: Theory examinations; research project reports and presentation; literature review/critique

Subject Description: One research project will be undertaken after consultation with academic staff. Students will attend and participate in a seminar/tutorial program in either the Department of Biological Sciences or the School of

Geosciences. Research may be a discrete component of a larger project in which the emphasis will be on solving a larger problem as part of a research team. Projects will focus on developing competence in a laboratory and/or field techniques. Intending students should consult the Coordinator before enrolment.

MARE393 Advanced Marine Science Project 8cp

Autumn/ Spring Wollongong On Campus

Summer 2004/05 Wollongong On Campus

Pre-requisites: Distinction average in relevant 2nd year Marine Science subjects

Restrictions: Students are assumed to be adequately prepared to undertake a research project in Marine Science. Evidence of 'fitness' is required if work involves snorkelling, SCUBA, use of boats or inter-tidal work. Available only to students enrolled in BSc (Marine Science)

Assessment: Literature review 25%; project report 55%; tutorial report/presentation 10%; seminar 10%.

Subject Description: One research project will be undertaken after consultation with academic staff. Students will attend and participate in a seminar/tutorial program in either the Department of Biological Sciences or the School of Geosciences. Research may be a discrete component of a larger project in which the emphasis will be on solving a larger problem as part of a research team. Projects will focus on developing competence in a laboratory and/or field techniques. Intending students should consult the Coordinator before enrolment.

NANO101 Current Perspectives in Nanotechnology 6cp

Autumn Wollongong On Campus

Contact Hours: 1h Lecture; 1h Seminar; 2h Tutorial; 2h Lab.

Assessment: Major Essay 25%, Written Exam 50%, Practical Assessment 25%

Subject Description: Series of case studies from the main application areas of nanotechnology (electronics, micro- and nano-electromechanical systems; biomimetics; nanostructured materials) illustrating the reasons why the nano-dimension offers advantages. Each case study will provide an overview of the importance of design, synthesis and characterisation in the realisation of the end-products. Guest lectures, web resources and tours of nanotechnology laboratories will be a feature as will demonstrations of the synthesis and characterisation of nano-materials (eg. AFM and nano-manipulation).

NANO201 Research Topics in Nanotechnology 6cp

Spring Wollongong On Campus

Contact Hours: 2h Lecture; 3h Workshops/Prac; 1h Seminar.

Prerequisites: Nano101

Assessment: Literature Report 20%, Laboratory Report 20%, Seminar 10%, Exam 50%

Subject Description: Series of case studies illustrating the development of understanding of materials behaviour at the nano-dimension; the methods for preparing nano-scale materials and the design, fabrication and testing of nano-devices. Emphasis in this subject is on the nanoscience and how the basic studies in chemistry, physics and materials provides the basis for understanding the current research in nanotechnology. A feature will be the laboratory

demonstration of specific nano-phenomena (eg. tuned optical absorbance of nanoparticles).

NANO301 Research Topics in Nanomaterials 8cp

Autumn Wollongong On Campus

Contact Hours: Lab based project - Seminar Program.

Prerequisites: Nano201

Assessment: Major report 80%, Seminar 10%, Poster 10%

Subject Description: Students will carry out a research project within a Materials based research group under the supervision of one or more members of staff. A list of possible projects will be provided and students will give a number of preferences. This includes work with the Intelligent Polymers Research Institute (IPRI), Institute for Superconducting and Electronic Materials (ISEM) and Institute for Steel Processing & Products (ISPP). This way the students may be distributed around the various groups. The research is equivalent to about 120 hours lab time plus analysis, and report writing. Students will also attend seminar/lecture series (1 hour per week)

NANO401 Honours Project in Nanomaterials/ Nanotechnology 24cp

Annual Wollongong On Campus

Contact Hours: 28hr per week.

Prerequisites: Nano301

Assessment: Major Thesis 70%, Two seminars 20%, Poster 10%

Subject Description: Students will carry out a research project within a Materials based research group under the supervision of one or more members of staff. A list of possible projects will be provided and students will give a number of preferences. Students write a major thesis based on their work that is examined by two independent examiners.

SCIE101 Modern Perspectives in Science 6cp

Summer 2004/05 Wollongong Flexible

Spring Loftus On Campus

Contact Hours: 5 hours per week web-based delivery of lectures and practicals.

Assessment: Written practical reports 60%, project 40%

Subject Description: This subject aims to address some of the major topical issues in modern science and their impact on our society as well as demonstrating the value of a cross-disciplinary approach to problem solving. The content is presented in four modules from Physics, Chemistry, Biology and Geosciences. The topics initially proposed are: Planetology; Smart Chemistry; Genetic Engineering; How long? How hot? Each of the four modules provides examples of areas of science that are currently of widespread interest or importance. The way in which science has been used to solve technological and human problems will be illustrated in each module. The fourth module also includes a section on global warming. To demonstrate the need for a collaborative approach when solving major issues, the same problem will be studied from the viewpoint of different disciplines. These modules are examples of current research topics and modules may be interchanged to reflect contemporary topics.

SCIE122 Biology For Nursing 6cp

Spring Wollongong On Campus

Assessment: Practical class attendance and reports; Practical and theory examinations

Subject Description: Provides an introduction to biological structure and function at the biochemical, genetic, cellular, and tissue levels, and how interactions between these levels of organisation vary during health and disease. Examines the interactions between micro-organisms of medical relevance and their hosts.

SCIE292 Science Research Internship 6cp

Autumn/ Spring Wollongong On Campus

Annual Wollongong On Campus

Summer 2004/05 Wollongong On Campus

Contact Hours: 100 hours total lab or field work plus seminar attendance.

Prerequisites: 24 credit points of Science Schedule subjects with a credit average greater than or equal to 65%

Assessment: 10% Completion of OH&S induction, 70% completion of 100 hours lab/field work, 15% end of project paper, 5% attendance at six seminars

Subject Description: This internship subject will provide students who have an interest in research with the opportunity to learn how research is done by working alongside researchers in an active research group. Emphasis will be on Occupational Health and Safety management and risk assessment, learning practical skills in the selected discipline, working as part of a team, achieving research objectives in laboratory or field work, accurately recording methods and results, and critically evaluating the research methods of others.