



UNIVERSITY  
OF WOLLONGONG  
AUSTRALIA

## School of Biological Sciences

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### BIOL103: Molecules, Cells and Organisms

#### Subject Outline

Spring, 2018  
On-Campus  
Wollongong

#### Subject Information

Credit Points: 6  
Pre-requisite(s): Nil  
Co-requisite(s): Nil  
Restrictions: Nil  
Contact Hours: 2hrs Lectures, 3hrs Practical

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#### Subject Contacts

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Consultation mode and times:	Email for appointment

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## **Student Support and Advice**

For general enquiries please contact StudentHub 41:

Location: 41.138B

Telephone: 61 2 4221 3492

Email: [smah-students@uow.edu.au](mailto:smah-students@uow.edu.au)

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## **Section A: General Information**

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### **Subject Learning Outcomes**

On completion of this subject, students should be able to:
1. Describe the characteristics of the most important classes of biological molecules and the major features of the structure and function of cells and sub-cellular organelles
2. Describe the cell cycle, the molecular basis of inheritance and the flow of genetic information from genes to proteins
3. Describe organisms fundamental to the study of microbiology
4. Describe how the immune system recognises and responds to immunogenic antigens
5. Demonstrate ability to work effectively in groups; analyse results and present data clearly and concisely
6. Demonstrate ability to research and present relevant scientific advancements in various formats (for example posters, seminars)

### **Subject Description**

BIOL103 is the study of molecules, cell and organisms fundamental to biology. This subject provides an introduction to the topic areas of cell biology, biochemistry, biotechnology, genetics, microbiology and immunology. During this subject you will look closely at the links between structure and function in cells and important biological molecules whilst investigating cellular division and mechanisms to control the cell cycle and prevent cancer. You will hear about techniques in genetic engineering and break throughs in biotechnology. You will learn about different microorganisms and their role in human, animal and/or plant health and explore the physiology of the immune system. Through engagement in group research projects you will develop skills in effective research and communication, teamwork, self-reflection and peer assessment whilst developing your digital literacy skills in presenting your research through PowerPoint (or similar tools) and generation of an electronic Portfolio.

### **Readings, References and Materials**

#### **Textbooks**

The following text(s) will need to be purchased by students enrolled in this class.

Campbell Biology/Jane B Reece et al. 2018, 11<sup>th</sup> Ed., Australian and New Zealand Version. Pearson, Australia. (Website: <https://www.pearsonmylabandmastering.com/au/>. There are many useful tutorials and animations on the textbook website)

Practical Skills in Biology, Alan Jones et al. 2016, 6<sup>th</sup> Ed, Pearson, Australia.

#### **Prescribed Readings (includes eReadings)**

Nil

#### **Materials**

- Practical manual and workbook (accessible from the subject Moodle site).
- Calculator.
- Ruler, pen etc.
- Laboratory coat (essential in this subject).
- For dry practicals, also bring your textbook.

## Recommended Readings

The following references complement the prescribed readings and textbooks:

Stephenson, F.H. (2016). Calculations in Molecular Biology and Biotechnology. 3<sup>rd</sup> ed. San Diego: Academic Press.

Knox, B., Ladiges, P., Evans, B. and Saint, R. (2014). Biology: An Australian Focus. 5<sup>th</sup> ed.. Australia: McGraw Hill.

Raven, P., Johnson, G.B., Mason, K.A., Losos, J.B. and Singer, S.S. (2017). Biology, 11<sup>th</sup> ed. McGraw Hill.

Clark, D.P. (2013). Molecular Biology, 2<sup>nd</sup> edition. Oxford: Elsevier. (ebook)

Karp, G. (2015). Cell and Molecular Biology: Concepts and Experiments, 8<sup>th</sup> ed. New Jersey: John Wiley.

Recommended readings are not intended as an exhaustive list, students should use the Library catalogue and databases to locate additional resources. There are other general biology texts as well as specialist books and review journals covering various areas of biology (i.e. genetics, biochemistry, botany and zoology). General scientific articles covering many areas in modern biology can be found in journals such as Scientific American and New Scientist as well as more specific articles in the weekly scientific journals Nature and Science.

## Recent Changes to this Subject

In 2018 three practical classes will be presented and assessed online, forming the practical quiz component of this subject which is worth 15% of the total assessment mark.

In 2018 the dry practical assessments will consist of an oral seminar to be presented in either week 11 or 12 of session, and an ePortfolio reflection and peer review to be conducted in week 13 (this is the same as in 2017). The ePoster has been removed in 2018.

In 2018 the mid-session quiz will contain multiple choice and short answer questions.

In 2018 the final exam is worth 50% of the total assessment mark, compared to 55% in 2017.

## Ethical Objection to the Use of Animal and Animal Products

In order to achieve specific learning objectives, the use of animals, animal tissues, and or animal-derived products (such as sera) is inherent and unavoidable. Students with conscientious objections to this use should not enrol in this subject.

Students who intend to avoid a particular learning activity on the basis of conscientious objection should notify the subject coordinator in writing as soon as possible and **not later than the end of Week 1 of the session**. Students who do not participate in a particular learning activity are required to complete an alternative exercise or attend the practical and "observe". The material involved is examinable and the prac must be written up and completed in your workbook. For further information, refer to <http://www.uow.edu.au/about/policy/UOW058708.html>

## Laboratory Safety Guidelines

1. At various stages in the course, you may work with micro-organisms, and various reagents which are corrosive, acutely toxic, cumulative poisons, or inflammable and potentially explosive. As a general practice, therefore, you should neither eat nor smoke in a laboratory; **both are forbidden in our class laboratories.**
2. A laboratory coat is for your protection and must be worn in the laboratory at all times.
3. Without adequate footwear there is a constant danger of feet being cut by glass or injured by corrosive substances such as concentrated acids or alkalis. You should therefore ensure that your feet are covered. **Under no circumstances will thongs, sandals or bare feet be permitted.**
4. Note the position of the safety shower in the laboratory. If you get a large amount of corrosive substance on your skin or clothing, use the shower quickly and copiously. Burns should be treated by **immediately** dousing the burnt skin with liberal amounts of cold water.
5. Spilt acids, alkalis and organic solvents damage benches and floor and are a hazard for other people in the laboratory. If you spill any, **immediately** seek the help of a demonstrator or member of the technical staff to clean it up in the appropriate manner.
6. However clean a bench might be, **always assume that is too dirty for a pipette or spatula. Rest pipettes, which are in intermittent use, in racks.** When you have finished with them, discard them into the container provided.
7. Attend practical class **on time** in order to receive important pre-practical instructions.
8. Use of personal items such as MP3 players or other musical devices is prohibited whilst in all areas of the laboratory.
9. Common sense is expected at all times. There should be no horseplay or practical jokes in the laboratory.
10. **Information about risks** associated with each practical will be available in the laboratory. Material Safety Data Sheets (MSDS) detailing the hazards and safety procedures associated with any hazardous substances will also be provided. You **MUST** read this before each practical.
11. In the laboratory, keep your workspace as tidy as possible throughout the practical and completely clean at the completion of the practical. Follow instructions in the laboratory for disposal of all waste, including contaminated waste and broken glass.
12. All instructions for the handling of organisms and equipment must be carefully adhered to. It is **YOUR** responsibility to follow these instructions carefully.
13. Familiarise yourself with the evacuation procedure in case of evacuation.
14. **If an accident occurs, alert your demonstrator and/or the practical supervisor. An accident/injury/incident form must be completed as soon as possible after the incident.** These are available from the laboratory technician.
15. Treat instruments with care and keep them clean.
16. Wash your hands, immediately and thoroughly if they are contaminated with microorganisms, radioactive materials or any chemical reagents. Always wash them, in any case, at the end of the class.

## List of Topics Covered

The following are examples of the topics to be covered in this course. This is not an exhaustive list and will be subject to change.

A Timetable of Topics will be available from the eLearning site in week 1 of session.

- The chemistry of life
- Macromolecules: proteins, carbohydrates and lipids
- Cell structure and membrane transport
- Cell-cell interactions
- Enzymes, metabolism and cellular respiration
- Cell division, cell cycle control and cancer
- Meiosis, heredity and genetic disease
- Genes, DNA synthesis and the information flow from DNA to protein
- Genetic engineering and biotechnology
- Microbiology: viruses, bacteria, protozoans and fungi
- Immunology: innate and adaptive immunity

## Section B: Assessment

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### Assessment Summary

Assessment Item	Form of Assessment	Due Date	Return/Feedback Due Dates	Weighting
Assessment 1	Mid-Session Theory	Week 5 practical class	Within 3 weeks of submission	10%
Assessment 2	Practical Quiz	After each online practical class	Within 3 weeks of submission	15%
Assessment 3	Dry Practical Assessment (2)	Week 11 or 12 and 13 practical class	Within 3 weeks of submission	25%
Assessment 4	Final Examination	UOW Exam Period	Not returned	50%
<b>Total Marks</b>				<b>100%</b>

### Details of Assessment Tasks

Assessment tasks will be marked using explicit criteria that will be provided to students prior to submission.

<b>Assessment 1</b>	Mid-Session Theory
Due date	Week 5 Practical Class
Weighting	10%
Submission	Exam papers and answers must be submitted at the conclusion of the exam.
Type of Collaboration	Individual Assessment
Length	21 questions in 30 minutes
Details	<p>The material covered in lectures weeks 1-5 will be examined by a mid-session quiz in the format of multiple choice and short answer questions. Students arriving late will not be able to sit for the quiz and will receive zero for this assessment.</p> <p>The mid-session theory is designed to provide you with:</p> <ul style="list-style-type: none"><li>a) Theoretical questions to develop your abilities at processing, and interpreting data.</li><li>b) Relevant examples of the type of questions included in the final exam in this subject. These will allow you to become familiar with the level of knowledge expected of you in the final exam.</li></ul>
Style and format	Multiple Choice and Short Answer Questions
Subject Learning Outcomes	1, 2
Marking Criteria	Marked against a standardised answer sheet



<b>Assessment 2</b>	Practical Quiz
Due date	After Each Online Practical Class (up to 3 in total)
Weighting	15%
Submission	Online.
Type of Collaboration	Individual Assessment
Length	30 minutes
Details	Material covered in practicals will be covered in the practical quizzes. The quizzes will be completed online. Students failing to complete the online quiz in the time allocated will receive zero for this assessment. Typically, you are provided with some experimental theory or data analogous to that investigated during one of the practical classes, and asked to identify and or make calculations and conclusions from that data and information.
Style and format	Multiple choice, fill-in-the-blanks, matching, true/false and short answer questions
Subject Learning Outcomes	5
Marking Criteria	Marked against a standardised answer sheet and database

<b>Assessment 3</b>	Dry Practical Assessment (2)
Due date	Week 11 or 12 Tutorial/Practical Class Week 13 Practical Class
Weighting	25%
Submission	Submit an electronic copy of your seminar PPT presentation and ePortfolio reflection via upload to eLearning and present your seminar to your tutor, lecturer or demonstrator during the required class. Submit peer assessment sheets during the required classes.
Type of Collaboration	Group Research Project
Length	Seminar: 15 minutes, ePortfolio: 1500 words equivalent
Details	In this assessment, you are asked to research a particular lecture topic covered in Biol103. Through your research you are to collect examples of where this knowledge is being used in a practical or 'real world' setting and as a group, share this knowledge with the other students in your practical class in the form of a group seminar presentation (week 11/12). This assignment is designed for group work and as such ALL members of the group are expected to contribute to all aspects of this assignment. All group members will be asked to assess their own and all other group members' contributions to each assessment. Each student will also be required to create an ePortfolio reflecting on their experience during the project and submit this at the end of week 12. Each student will have to peer assess other students ePortfolios during classes in week 13.
Style and format	Oral Presentation and ePortfolio reflection
Subject Learning Outcomes	5, 6
Marking Criteria	Marking criteria is provided in the subject practical manual and in class.

<b>Assessment 4</b>	Final Examination
Due date	UOW Exam Period
Weighting	50%
Submission	Exam papers and answers must be submitted at the conclusion of the exam.
Type of Collaboration	Individual Assessment
Length	3 hours
Details	The final examination will cover lecture and practical material. Some example questions will be given during lectures and practical classes. The exam format will be similar to the mid-session and practical quizzes.
Style and format	Multiple choice and short answer questions
Subject Learning Outcomes	1, 2, 3, 4, 5
Marking Criteria	Marked against a standardised answer sheet

## Minimum Requirements for a Pass in this Subject

To receive a clear pass in this subject a total mark of 50% or more must be achieved. In addition, failure to meet any of the minimum performance requirements is grounds for awarding a Technical Fail (TF) in the subject, even where total marks accumulated are greater than 50%.

The minimum performance requirements for this subject are:

- Achieve a minimum of 40% in the Final Examination

## Minimum Student Attendance and Participation

It is expected that students will allocate 12 hours per week to this subject, including any required class attendance, completion of prescribed readings and assessment tasks.

Student attendance at tutorials, practicals, seminars and/or simulations is compulsory and students must attend at least 80% of classes. Absences will require the submission of an application for Academic Consideration via SOLS and the presentation of suitable documentation, for example a Medical Certificate, to Student Central as soon as practical. For further details about applying for academic consideration visit the Student Central webpage:

<http://www.uow.edu.au/student/central/academicconsideration/index.html>

## Scaling

Scaling may occur in this subject at the end of session by the Unit Assessment Committee and/or Faculty Assessment Committee (FAC). Marks will only be scaled to ensure fairness/parity of marking across groups of students. Scaling will not affect any individual student's rank order within their cohort. For more information refer to Assessment Guidelines – Scaling:

<http://www.uow.edu.au/about/policy/UOW039331.html>

## Late Submission

Late submission of an assessment task without an approved extension of the deadline is not acceptable. If you are unable to submit an assessment due to extenuating circumstances (e.g. medical grounds or compassionate grounds), you can make an application of academic consideration. Not all circumstances qualify for academic consideration. For further details about applying for academic consideration visit the Student Central webpage:

<http://www.uow.edu.au/student/central/academicconsideration/index.html>

## Late Submission Penalty – at 10%

Late submission of an assessment task without an approved extension of the deadline is not acceptable. Marks will be deducted for late submission at the rate of 10% of the total possible marks for that particular assessment task per day. This means that if a piece of work is marked out of 100, then the late penalty will be 10 marks per day (10% of 100 possible marks per day). The formula for calculating the late penalty is the total possible marks x 0.10 x number of days late. For the purposes of this policy a weekend (Saturday and Sunday) will be regarded as two days.

For example:

- Student A submits an assessment which is marked out of 100. The assessment is submitted 4 days late. This means that a late penalty of 40 marks will apply ( $100 \times 0.10 \times 4$ ). The assessment is marked as per normal out of 100 and is given a mark of 85/100, and then the late penalty is applied. The result is that the student receives a final mark of 45/100 for the assessment (85 (original mark) – 40 marks (late penalty) = 45/100 (final mark)).
- Student B submits a report which is marked out of 20. The report is submitted three days late. This means that a late penalty of 6 marks will apply ( $(20 \times 0.10 \times 3)$ ). The report is marked as per normal out of 20 and is given a mark of 15/20, and then the late penalty is applied. The result is that the student receives a final mark of 9/20 for the report (15 (original mark) – 6 marks (late penalty) = 9/20 (final mark)).

No marks will be awarded for work submitted after the assessment has been returned to the students (except where a particular assessment task is undertaken by students at different times throughout the session, but where the assessment is based on experiments or case studies specific to a student). Notwithstanding this, students must complete all assessment tasks to a satisfactory standard and submit them, regardless of lateness or loss of marks, where submission is a condition of satisfactorily completing the subject.

## Supplementary Assessments

Supplementary assessment may be offered to students whose performance in this subject is close to that required to pass the subject, and are otherwise identified as meriting an offer of a supplementary assessment. The precise form of supplementary assessment will be determined at the time the offer of a supplementary assessment is made.

Students can log on to SOLS and click on the link titled “Supplementary Assessment” to view any applicable offers or use the following link;

<http://www.uow.edu.au/student/exams/suppassess/index.html>

## System of Referencing Used for Written Work

The Author-Date (Harvard) referencing system should, unless otherwise specified for a particular assessment (check Details of Assessment Tasks), be utilised. A summary of the Harvard system can be accessed on the Library website at: <http://uow.libguides.com/refcite>

## Submission of Assessments

Refer to the submission requirements under the details of the individual assessments. Students should ensure that they receive a receipt acknowledging submission. Students will be required to produce this in the event that an assessment task is considered to be lost. Students are also expected to keep a copy of all their submitted assessments in the event that re-submission is required.

## Assessment Return

Students will be notified when they can collect or view their marked assessment. In accordance with University Policy marked assessments will usually only be held for 21 days after the declaration of marks for that assessment.

## Section C: General Advice

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Students should refer to the Faculty of Science, Medicine and Health website for information on policies, learning and support services and other general advice.

### Student Consultation and Communication

University staff receive many emails each day. In order to enable them to respond to your emails appropriately and in a timely fashion, students are asked to observe basic requirements of professional communication.

***Please ensure that you include your full name and student number and identify your practical class or tutorial group in your email so that staff know who they are communicating with and can follow-up personally where appropriate.***

#### ***Consider what the communication is about***

- Is your question addressed elsewhere (e.g. in the subject outline or, on the eLearning site)?
- Is it something that is better discussed in person or by telephone? This may be the case if your query requires a lengthy response or a dialogue in order to address. If so, see consultation times above and/or schedule an appointment.
- Are you addressing your request to the most appropriate person?

#### ***Specific email subject title to enable easy identification of issue***

- Identify the subject code of the subject you are enquiring about (as staff may be involved in more than one subject) put this in the email subject heading. Add a brief, specific query reference after the subject code where appropriate.

#### ***Professional courtesy***

- Address the staff member appropriately by name (and formal title if you do not yet know them).
- Use full words (avoid 'text-speak' abbreviations), correct grammar and correct spelling.
- Be respectful and courteous.
- Allow 3 – 4 working days for a response before following up. If the matter is legitimately urgent, you may wish to try telephoning the staff member (and leaving a voicemail message if necessary) or inquiring at the School Office.

### eLearning Space

This subject has materials and activities available via eLearning. To access eLearning you must have a UOW user account name and password, and be enrolled in the subject. eLearning is accessed via SOLS (student online services). Log on to SOLS and then click on the eLearning link in the menu column. For information regarding the eLearning spaces please use the following link:

<https://www.uow.edu.au/student/elearning/index.html>

### Use of Internet Sources

Students are able to use the Internet to access the most current information on relevant topics and information. Internet sources should only be used after careful critical analysis of the currency of the information, the role and standing of the sponsoring institution, reputation and credentials of the author, the clarity of the information and the extent to which the information can be supported or ratified by other authoritative sources.

## Lecture, Tutorial, Laboratory Times

### On campus

All timetable information is subject to variation. Check latest timetabling information on the 'Current Student' webpage on UOW website or log into SOLS to view your personal timetable prior to attending classes.

<http://www.uow.edu.au/student/index.html>

Timetable information can be accessed from

<https://www.uow.edu.au/student/timetables/>

Key University Dates can be accessed from

<http://www.uow.edu.au/student/dates/index.html>

### Distance Delivery: (if relevant)

Where relevant, students will be advised by the Subject Coordinator of any online classes or discussion forums that they need to part-take in.

### Flexible Delivery: (if relevant)

Dates for study days and weeks will be listed online. All timetable information is subject to variation. Check latest timetabling information on the 'Current Student' webpage on UOW website or log into SOLS to view your personal timetable prior to attending classes.

## Extraordinary Changes for the Subject after Release of the Subject

### Outline

In extraordinary circumstances the provisions stipulated in this Subject Outline may require amendment after the Subject Outline has been distributed. All students enrolled in the subject must be notified and have the opportunity to provide feedback in relation to the proposed amendment, prior to the amendment being finalised.

## Learning Analytics

Data on student performance and engagement (such as Moodle and University Library usage, task marks, use of SOLS) will be available to the Subject Coordinator to assist in analysing student engagement, and to identify and recommend support to students who may be at risk of failure. If you have questions about the kinds of data the University uses, how we collect it, and how we protect your privacy in the use of this data, please refer to

<http://www.uow.edu.au/dvca/bala/analytics/index.html>

## The Assessment Quality Cycle

The Assessment Quality Cycle provides a level of assurance that assessment practice across the University is appropriate, consistent and fair.

Assessment Quality Cycle Activities are undertaken to contribute to the continuous improvement of assessment and promote good practices in relation to the:

- a. design of the assessment suite and individual assessment tasks;
- b. marking of individual assessment tasks;
- c. finalisation of subject marks and grades; and
- d. review of the subject prior to subsequent delivery

Copies of student work may be retained by the University in order to facilitate quality assurance of assessment processes.

## **Academic Integrity Policy**

The full policy on Academic Integrity Policy is found in the Policy Directory on the UOW website. "The University's Academic Integrity Policy, Faculty Handbooks and subject guides clearly set out the University's expectation that students submit only their own original work for assessment and avoid plagiarising the work of others or cheating. Re-using any of your own work (either in part or in full) which you have submitted previously for assessment is not permitted without appropriate acknowledgement or without the explicit permission of the Subject Coordinator. Plagiarism can be detected and has led to students being expelled from the University.

The use by students of any website that provides access to essays or other assessment items (sometimes marketed as 'resources'), is extremely unwise. Students who provide an assessment item (or provide access to an assessment item) to others, either directly or indirectly (for example by uploading an assessment item to a website) are considered by the University to be intentionally or recklessly helping other students to cheat. Uploading an assessment task, subject outline or other course materials without express permission of the university is considered academic misconduct and students place themselves at risk of being expelled from the University."

## **Student Academic Complaints Policy (Coursework or Higher Degree Research)**

In accordance with the Coursework Student Academic Complaints Policy, a student may request an explanation of a mark for an assessment task or a final grade for a subject consistent with the student's right to appropriate and useful feedback on their performance in an assessment task. Refer to the Coursework Student Academic Complaints Policy for further information.

## **Student Support Services and Facilities**

Students can access information on student support services and facilities at the following link. This includes information on "Academic Support", "Starting at University", "Help at University" as well as information and support on "Careers and Jobs". <http://www.uow.edu.au/student/services/index.html>

## **Student Etiquette**

Guidelines on the use of email to contact teaching staff, mobile phone use in class and information on the university guide to eLearning 'Netiquette' can be found at <https://www.uow.edu.au/student/learningcoop/software/email etiquette/index.html>

## UOW Grade Descriptors

The University of Wollongong Grade Descriptors are general statements that describe student performance at each of the University's grade levels.

Grade	Mark %	Descriptor
High Distinction HD	85-100	<p>A high distinction grade (HD) is awarded for performance that provides evidence of an outstanding level of attainment of the relevant subject learning outcomes, demonstrating the attributes of a distinction grade plus (as applicable):</p> <ul style="list-style-type: none"> <li>• consistent evidence of deep and critical understanding</li> <li>• substantial originality and insight in identifying, generating and communicating competing arguments, perspectives or problem-solving approaches</li> <li>• critical evaluation of problems, their solutions and their implications</li> <li>• use of quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work</li> <li>• creativity in application as appropriate to the discipline</li> <li>• eloquent and sophisticated communication of information and ideas in terms of the conventions of the discipline</li> <li>• consistent application of appropriate skills, techniques and methods with outstanding levels of precision and accuracy</li> <li>• all or almost all answers correct, very few or none incorrect</li> </ul>
Distinction D	75-84	<p>A distinction grade (D) is awarded for performance that provides evidence of a superior level of attainment of the relevant subject learning outcomes, demonstrating the attributes of a credit grade plus (as applicable):</p> <ul style="list-style-type: none"> <li>• evidence of integration and evaluation of critical ideas, principles, concepts and/or theories</li> <li>• distinctive insight and ability in applying relevant skills, techniques, methods and/or concepts</li> <li>• demonstration of frequent originality in defining and analysing issues or problems and providing solutions</li> <li>• fluent and thorough communication of information and ideas in terms of the conventions of the discipline</li> <li>• frequent application of appropriate skills, techniques and methods with superior levels of precision and accuracy</li> <li>• most answers correct, few incorrect</li> </ul>
Credit C	65-74	<p>A credit grade (C) is awarded for performance that provides evidence of a high level of attainment of the relevant subject learning outcomes, demonstrating the attributes of a pass grade plus (as applicable):</p> <ul style="list-style-type: none"> <li>• evidence of learning that goes beyond replication of content knowledge or skills</li> <li>• demonstration of solid understanding of fundamental concepts in the field of study</li> <li>• demonstration of the ability to apply these concepts in a variety of contexts</li> <li>• use of convincing arguments with appropriate coherent and logical reasoning</li> <li>• clear communication of information and ideas in terms of the conventions of the discipline</li> <li>• regular application of appropriate skills, techniques and methods with high levels of precision and accuracy</li> <li>• many answers correct, some incorrect</li> </ul>
Pass P	50-64	<p>A pass grade (P) is awarded for performance that provides evidence of a satisfactory level attainment of the relevant subject learning outcomes, demonstrating (as applicable):</p> <ul style="list-style-type: none"> <li>• knowledge, understanding and application of fundamental concepts of the field of study</li> <li>• use of routine arguments with acceptable reasoning</li> <li>• adequate communication of information and ideas in terms of the conventions of the discipline</li> <li>• ability to apply appropriate skills, techniques and methods with satisfactory levels of precision and accuracy</li> <li>• a combination of correct and incorrect answers</li> </ul>
Fail F	<50	<p>A fail grade (F) is given for performance that does not provide sufficient evidence of attainment of the relevant subject learning outcomes.</p>
Technical Fail TF		<p>A technical fail (TF) grade is given when minimum performance level requirements for at least one assessment item in the subject as a whole has not been met despite the student achieving at least a satisfactory level of attainment of the subject learning outcomes.</p>
Satisfactory S		<p>A satisfactory grade (S) is awarded for performance that demonstrates a satisfactory level of attainment of the relevant subject learning outcomes.</p>
Unsatisfactory U		<p>An unsatisfactory grade (U) is awarded for performance that demonstrates an unsatisfactory level of attainment of the relevant subject learning outcomes.</p>
Excellent E		<p>An excellent grade (E) may be awarded, instead of a satisfactory grade (S), within subjects from the School of Medicine that have been completed with a consistent pattern of high standard of performance in all aspects of the subject.</p>

More details on UOW Grade descriptors can be found on the following link

<http://www.uow.edu.au/content/groups/public/@web/@gov/documents/doc/uow194941.pdf>

## University Policies

Students should be familiar with the following University policies:

- a. Code of Practice – Teaching and Assessment  
<http://www.uow.edu.au/about/policy/UOW058666.html>
- b. Code of Practice – Research, where relevant  
<http://www.uow.edu.au/about/policy/UOW058663.html>
- c. Code of Practice – Honours, where relevant  
<http://www.uow.edu.au/about/policy/UOW058661.html>
- d. Student Charter  
<http://www.uow.edu.au/student/charter/index.html>
- e. Code of Practice – Student Professional Experience, where relevant  
<http://www.uow.edu.au/about/policy/UOW058662.html>
- f. Academic Integrity and Plagiarism Policy  
<http://www.uow.edu.au/about/policy/UOW058648.html>
- g. Student Academic Consideration Policy  
<http://www.uow.edu.au/about/policy/UOW058721.html>
- h. Course Progress Policy  
<http://www.uow.edu.au/about/policy/UOW058679.html>
- i. Academic Complaints Policy (Coursework and Honours Students)  
<http://www.uow.edu.au/about/policy/UOW058653.html>
- j. Inclusive Language Policy  
<http://www.uow.edu.au/about/policy/alphalisting/UOW140611.html>
- k. Workplace Health and Safety, where relevant  
<http://staff.uow.edu.au/ohs/index.html>
- l. Intellectual Property Policy  
<http://www.uow.edu.au/about/policy/UOW058689.html>
- m. IP Student Assessment of Intellectual Property Policy, where relevant  
<http://www.uow.edu.au/about/policy/UOW058690.html>
- n. Policy on Ethical Objection by Students to the Use of Animal and Animal Products in Coursework Subjects, where relevant  
<http://www.uow.edu.au/about/policy/UOW058708.html>
- o. Human Research Ethics Guidelines, where relevant  
<http://www.uow.edu.au/research/ethics/human/index.html>
- p. Animal Research Guidelines, where relevant  
<http://www.uow.edu.au/research/ethics/UOW009373.html>
- q. Student Conduct Rules and accompanying Procedures or Research Misconduct Policy for research students  
<http://www.uow.edu.au/about/policy/rules/UOW060095.html>



## Version Control Table

Version Control	Release Date	Author/Reviewer	Approved By	Amendment
2	20180716	Tracey Kuit – Subject Coordinator	Sonia Losinno – L&T Officer	Version 2
1	20180516	Tracey Kuit – Subject Coordinator	Sonia Losinno – L&T Officer	Final BIOL103 Spring 2018 Subject Outline