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The published on-line version of the Course Profile is the authoritative version and by the publication of the Course Profile on-line the University deems the student has been notified of and read the course requirements.

# 1. General Course Information

## 1.1 Course Details

<b>COURSE CODE</b>	2000MSC
<b>COURSE TITLE</b>	Molecular Genetics
<b>ACADEMIC ORGANISATION</b>	MSC School of Medical Science
<b>TRIMESTER</b>	Trimester 1 2020
<b>MODE</b>	In Person
<b>LEVEL</b>	Undergraduate
<b>LOCATION</b>	Gold Coast, On Campus
<b>CREDIT POINT VALUE</b>	10

## Course Description:

This course equips students to tackle problems of information transfer by genetic systems. The nature of genes, their organisation in living cells, their expression and methods of manipulation are covered as well as basic Mendelian and human clinical genetics. The course will also focus on the tools and methods of genetic engineering and analysis and the ethical issues involved. Prerequisite: 1005MSC Genes and Disease OR 1042SCG Genetics and Evolutionary Biology

## Assumed Background:

A basic knowledge of biology is assumed and proficiency in first year biological science is assumed.

## 1.2 Course Introduction

Understanding the molecular basis of genes and the information that a gene provides to an organism is essential knowledge for health-care professionals and medical researchers.

To equip students with this knowledge, the course will examine and explore the relationship between the 3 major branches of genetics;

1. Transmission genetics, the study of the transmission of traits from generation to generation which was pioneered by Mendel;
2. Molecular genetics, the study of the composition and role of genetic material, which explains the transmission of traits first described by Mendel and
3. Population Genetics, the study of variation and evolution that occurs in populations.

## Previous Student Feedback

Students enjoyed the course, commented that it was interesting, well structured and enjoyable. Students felt that the teaching methods and support used in the course were helpful for their learning, and that the expectations and assessment were clear and fair. Students enjoyed the laboratory classes and how they tied in with lecture content.

Some students felt very challenged and alarmed by current ethical discussion in human genetics, which covers many culturally sensitive and ethically ambiguous positions. A commitment to open and vigorous debate on scientific and cultural issues as well as technical issues related to genetics is necessary to be fully equipped to operate in this modern and rapidly changing field of discovery.

Students wanted more extensive and quick feedback on exam performance. A problem with that issue is that there were a large number of deferred exams, for various reasons, so it is difficult to discuss exams when some students have not yet sat the assessment. This delay seems difficult to avoid.

## 1.3 Course Staff

Primary Convenor **APro Nigel Morrison**

<b>PHONE</b>	28330
<b>EMAIL</b>	<a href="mailto:n.morrison@griffith.edu.au">n.morrison@griffith.edu.au</a>
<b>CAMPUS</b>	Gold Coast Campus
<b>BUILDING</b>	Science 2 (G12)
<b>ROOM</b>	3.07

## 1.4 Timetable

Timetables are available on [the Programs and Courses website](#).

NB: Details contained in this section of the course profile and section 4.1 Learning Activities are to be read in conjunction with the official class timetable. The published class timetable which is the authoritative source for timetabling information for all campuses can be located by clicking on the link above.

## 1.5 Lecture Capture

It is standard practice at Griffith University that lectures timetabled in lecture capture-enabled venues are recorded and made available to students on the relevant course site, in accordance with the University's [Lecture Capture Policy](#).

The lecture series delivered as part of this course will be recorded and accessible via the Learning@Griffith course site.

## 2. Aims, Outcomes & Graduate Attributes

### 2.1 Course Aims

This course aims to equip students with a sound understanding of the basic concepts of genetics including Mendelian, medical, population, evolutionary, and molecular genetics, and to demonstrate how information is acquired within the discipline as it grows.

Second, this course aims to provide students with practical laboratory skills in current molecular genetics techniques and present opportunities to work collaboratively in pairs and in small groups to achieve experimental outcomes and solve practical and real-life problems relating to the discipline.

Third, this course aims to promote an understanding of important ethical issues arising from current and potential future applications of biotechnology and its impact on society thus providing a framework of knowledge upon which students can develop and argue a viewpoint.

### 2.2 Learning Outcomes

After successfully completing this course you should be able to:

- 1 Explain the basic concepts of genetics including Mendelian, medical, population, evolutionary, and molecular genetics
- 2 Demonstrate basic laboratory skills in current molecular genetics techniques and working in pairs or small groups, apply those skills to practical problems in a laboratory setting.
- 3 Integrate practical skills with theoretical knowledge of molecular genetics to solve real-life problems or make predictions based on acquired knowledge.
- 4 Analyse experimental data relating to molecular genetics techniques and communicate results by a written report
- 5 Demonstrate an understanding of the technological advances in the science of genetics at the molecular and cellular levels.
- 6 Demonstrate an understanding of the important ethical issues surrounding gene technology and present arguments for and against.
- 7 Evaluate the literature in a particular focus area of contemporary genetic research and summarise and present findings.
- 8 Participate in group work and communicate effectively orally and using multimedia to a group of peers
- 9 Work productively in a laboratory setting by demonstrating preparation, participation, professionalism and safe work practices.

### 2.3. Graduate Attributes

For further details on the Griffith Graduate please [click here](#)

Griffith University prepares influential graduates to be:

- [Knowledgeable and skilled, with critical judgement](#)
- [Effective communicators and collaborators](#)
- [Innovative, creative and entrepreneurial](#)
- [Socially responsible and engaged in their communities](#)
- [Culturally capable when working with First Australians](#)
- [Effective in culturally diverse and international environments](#)

**This table demonstrates where each of the Griffith Graduate Attributes is taught, practised and assessed in this course.**

For further details on the Griffith Graduate Attributes please refer to [The Griffith Graduate policy](#).

University wide attributes

GRADUATE ATTRIBUTE	TAUGHT	PRACTISED	ASSESSED
Knowledgeable and skilled, with critical judgement	•	•	•
Effective communicators and collaborators	•	•	•
Socially responsible and engaged in their communities	•		

## 3. Learning Resources

### 3.1 Required Resources

Details of your Required Learning Resources are available from the [Reading List](#).

### 3.2 Recommended Resources

Details of your Recommended Learning Resources are available from the [Reading List](#).

### 3.3 University Learning Resources

The University provides many facilities and support services to assist students in their studies. Links to information about University support resources that are available to students are included below for easy reference.

[Readings](#) - New online service enabling students to access Required and Recommended Learning resources. It connects to the library catalogue to assist with quickly locating material held in Griffith libraries and enables students to manage and prioritise their readings, add personal study notes and export citations.

[Learning@Griffith](#) - there is a dedicated website for this course via the Learning@Griffith at myGriffith.

[Academic Integrity Tutorial](#) - this tutorial helps students to understand what academic integrity is and why it matters. You will be able to identify types of academic misconduct, understand what skills you will need in order to maintain academic integrity, and learn about the processes of referencing styles.

[Student Support](#) provides a range of services to support students throughout their studies including personal support such as Counselling and Health Services; Academic support; and Financial and Welfare support.

[Careers and Employment Service](#) can assist all enrolled students and recent graduates with career direction, course uncertainty, interview preparation, job search tips, LinkedIn reviews and much more. Our [Unitemps Recruitment Service](#) can assist you with finding paid casual work while you study.

[Library and Learning Services](#): Library and Learning Services provides a wide range of quality client-focused services and programs to students, researchers and staff of the University. Library and Learning Services works in collaboration with the academic community to achieve academic and research outcomes.

[Support for learning](#) - the University provides access to common use computing facilities for educational purposes.

[Code of Practice](#) - Griffith Information Technology Resources.

MSC School of Medical Science

### 3.4 Learning Resources

### 3.5 Other Learning Resources & Information

Many advanced genetics text books are adequate learning resources. [Concepts of genetics](#) - William S. Klug c2012 is an example. However, much of the material that we cover is available online in OMIM, on-line Mendelian Inheritance in Man web site and at PUB MED and NCBI and much use will be made of recent publications and on line material.

## 4. Teaching & Learning Activities

### 4.1 Learning Activities

#### Lecture Content

Week Commencing	Activity	Learning Outcomes
24 Feb 20	<b>Week 1 (Lecture):</b> Mendelian and quantitative Mendelian Genetics	1
2 Mar 20	<b>Week 2 (Lecture):</b> Linked/Sex Linked Genes and Sex Chromosomes	1
9 Mar 20	<b>Week 3 (Lecture):</b> Medical Genetics	1, 5
16 Mar 20	<b>Week 4 (Lecture):</b> Common genetic syndromes and DNA repair	1
23 Mar 20	<b>Week 5 (Lecture):</b> Population genetics	1, 5
30 Mar 20	<b>Week 6 (Exam):</b> Mid Trimester test	1
13 Apr 20	<b>Week 7 (Lecture):</b> Population genetics 2	1
20 Apr 20	<b>Week 8 (Lecture):</b> Genetic epidemiology	1
27 Apr 20	<b>Week 9 (Lecture):</b> Epigenetics and epigenetic syndromes	1
4 May 20	<b>Week 10 (Lecture):</b> Behaviour genetic syndromes	1, 5, 6
11 May 20	<b>Week 11 (Lecture):</b> Cancer Genetics and cancer epigenetics	1
18 May 20	<b>Week 12 (Lecture):</b> Ethics and Biotechnology plus final review of content	1

#### Laboratory Content

Week Commencing	Activity	Learning Outcomes
2 Mar 20	<p><b>Week 2 (Laboratory):</b> You must attend all laboratory activities. The schedule appears complex, but when understood is not so difficult.</p> <p>Laboratories are on Wednesday and Thursday. There are five different time slots. Whatever time slot you have enrolled in will be the time for you during the whole trimester.</p> <p>Wednesday labs are 9 am to 12 noon 1 pm to 4 pm 5 pm to 8 pm</p> <p>Thursday labs are 9 am to 12 noon 1 pm to 4 pm</p> <p>Weeks 2-6: so-called "wet labs" all in G39 4.20.</p> <p>Weeks 7 and 8: computer labs. Week 7 computer labs concern the use of on-line resources to examine certain syndromes. Week 8 labs concern analyzing laboratory results.</p> <p>Location changes. Wet labs (bench science) are in G39 4.20, weeks 2 to 6. Then weeks 7 and 8 are computer labs in various locations (including G02 1.26H). Then three weeks follow of student presentations. These require all students to attend their lab class time session and mark each other's presentations. These will be in various different tutorial rooms.</p> <p>Lab 1 on week 2. COMT and human personality Isolation of DNA from saliva DNA Structure Gene Crosses</p>	2, 3, 4
9 Mar 20	<p><b>Week 3 (Laboratory):</b> DNA Quantitation Identification of Sex Chromatin Sex Chromosomes</p>	2, 3, 4
16 Mar 20	<p><b>Week 4 (Laboratory):</b> COMT PCR Basic Chemistry Calculations</p>	2, 3, 4
23 Mar 20	<p><b>Week 5 (Laboratory):</b> COMT Restriction Digest Tumour suppressor gene p53 and cancer, PCR</p>	2, 3, 4
30 Mar 20	<p><b>Week 6 (Laboratory):</b> p53 Restriction Digest and electrophoresis COMT electrophoresis Gene Crosses</p>	2, 3, 4
13 Apr 20	<p><b>Week 7 (Laboratory):</b> Molecular Genetics and the WWW Inherited Human Disorders COMT genotyping p53 LOH analysis Genetic Traits I</p>	2, 3, 4, 7
20 Apr 20	<p><b>Week 8 (Laboratory):</b> COMT statistical analysis Genetic Traits II Pedigree analysis, linked genes, mutation</p>	2, 3, 4
27 Apr 20	<p><b>Week 9 (Laboratory):</b> Group Presentations</p>	5, 6, 7, 8, 9
4 May 20	<p><b>Week 10 (Laboratory):</b> Group Presentations</p>	5, 6, 7, 8, 9
11 May 20	<p><b>Week 11 (Laboratory):</b> Group presentations</p>	5, 6, 7, 8, 9



## 4.2 Other Teaching and Learning Activities Information

Teaching methods will include a combination of face-to-face strategies: formal lectures and laboratory sessions. Students are also encouraged to utilise internet resources and the Learning@griffith site for this course. The teaching methods have been designed to facilitate the development of a strong knowledge base in human molecular genetics techniques. Students will gain skills in teamwork and problem-solving in the laboratory setting.

### **Contact Summary**

**Formal lectures:** teaching weeks 1-12, 3 hours per week - Lectures will be delivered by academic staff and specialists. Attendance is expected.

**Laboratory sessions:** teaching weeks 2-11, 3 hours per week - attendance and participation is mandatory. Attendance will be monitored and checked at each laboratory session.

Course content will be explored in a way that explains the nature and relevance of concepts in the context of the practice of Medical Science.

## 5. Assessment Plan

### 5.1 Assessment Summary

Please refer to your course site in [Learning@Griffith](#) for up-to-date information regarding assessment items.

This is a summary of the assessment in the course. For detailed information on each assessment, see [5.2 Assessment Detail](#) below.

ASSESSMENT TASK	DUE DATE	WEIGHTING	MARKED OUT OF	LEARNING OUTCOMES	MAXIMUM EXTENSION PERIOD
<i>Workplace based assessment</i> Laboratory Competency Assessment	4 Mar 20 - 22 May 20 During laboratory classes	5%	25 marks	2, 3, 4, 9	
<i>Test or quiz</i> Laboratory Quizzes	23 Mar 20 - 27 Mar 20 Completed during laboratory classes in weeks 5 and 8	10%	20 marks	1, 2, 3	
<i>Exam - selected response</i> Mid trimester exam	3 Apr 20 13:00 - 3 Apr 20 14:00	20%	50 marks	1	
<i>Presentation - technical or professional</i> Laboratory Presentation	29 Apr 20 - 14 May 20	10%	10 marks	5, 6, 7, 8	
<i>Assignment - Laboratory/Laboratory Report</i> Laboratory Report	13 May 20 08:00 - 14 May 20 16:00 Refer to Lab Manual	10%	10 marks	1, 2, 3, 4	
<i>Exam - selected and constructed responses</i> End of Trimester Exam	Examination Period	45%	120 marks	1, 3, 4, 5, 6	

### 5.2 Assessment Detail

**Title:** Laboratory Competency Assessment

**Type:** Workplace based assessment

**Learning Outcomes Assessed:** 2, 3, 4, 9

**Due Date:**

4 Mar 20 - 22 May 20 During laboratory classes

**Weight:** 5%

**Marked out of:** 25

**Task Description:**

Students will be assessed on their competency in the laboratory classes based on their ability to undertake safe practices, prepare for classes, participate in classes and act in a professional manner.

**Criteria & Marking:**

**Assessment Criteria**

**Professionalism**

Students will be assessed on their ability to adhere to health and safety obligations and laboratory rules as outlined in the laboratory manual. Students will also be assessed on punctual attendance, and professional behaviour in the laboratory classes.

**Preparation**

Students will be assessed on their ability to select and handle appropriate equipment, follow experimental protocol, show evidence of preparation for class and produce expected results.

**Participation**

Students will be assessed on their ability to participate equally in experimental work, complete laboratory questions, seeking help as required, attending peer oral presentations and marking peers productively.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

**Title:** Laboratory Quizzes

**Type:** Test or quiz

**Learning Outcomes Assessed:** 1, 2, 3

**Due Date:**

23 Mar 20 - 27 Mar 20 Completed during laboratory classes in weeks 5 and 8

**Weight:** 10%

**Marked out of:** 20

**Task Description:**

Two laboratory quizzes worth 5% each will test knowledge gained in practical laboratory sessions and test ability to integrate this knowledge with core concepts of molecular genetics. The aim of the quizzes is to assess retention and comprehension of course content as a cumulative process with regular feedback on progress.

**Criteria & Marking:**

Students will be expected to demonstrate knowledge and understanding of concepts covered in laboratory classes from previous weeks as well as the background of laboratory classes in weeks 5 and 8, the weeks of the quiz.

**Submission:** Other. Completed and submitted in person, while in class.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

**Title:** Mid trimester exam

**Type:** Exam - selected response

**Learning Outcomes Assessed:** 1

**Due Date:**

3 Apr 20 13:00 - 3 Apr 20 14:00

**Weight:** 20%

**Marked out of:** 50

**Duration:** 60 minutes

**Format:** Closed Book

**Task Description:**

Mid trimester exam.

**Criteria & Marking:**

The mid semester exam will commence at 1pm 5th April 2019, in G16 1.08. One hour is allotted for the exam. Lectures will continue as usual afterwards. It is a multiple choice exam. Please give the correct response to the questions.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

**Title:** Laboratory Presentation

**Type:** Presentation - technical or professional

**Learning Outcomes Assessed:** 5, 6, 7, 8

**Due Date:**

29 Apr 20 - 14 May 20

**Weight:** 10%

**Marked out of:** 10

**Task Description:**

Students will be required to give a short presentation in pairs or a small group on a contemporary topic in genetics in the dry laboratory classes in week 9, 10 or 11. This presentation should include an analysis of pertinent ethical issues relating to a topic of choice. Suggested topics are listed in the Laboratory Manual. The pair/group will be expected to prepare a Powerpoint presentation, and each student will speak for ~4 minutes. The pair/group will be expected to answer one or two questions after the presentation.

**Criteria & Marking:**

This item has been designed to assess the ability to evaluate and summarize the literature in a particular focus area, including important ethical issues and the arguments for and against, the ability to work collaboratively, the ability to present in a clear and engaging manner and answer questions relating to the topic. Furthermore, this item will assess graduate skills, information literacy, critical evaluation, the ability to work in teams, creativity and innovation, and will help to develop communication skills.

Students will be provided with an opportunity to assess their peers by grading 5% of this item. The remaining 5% will be graded by lab instructors. Detailed marking criteria appears in Appendix 5 of the Laboratory Manual.

**This assessment item:**

- is a school based activity
- is a group activity
- does not include a self assessment activity
- does not have a re-attempt provision

**Title:** Laboratory Report

**Type:** Assignment - Laboratory/Laboratory Report

**Learning Outcomes Assessed:** 1, 2, 3, 4

**Due Date:**

13 May 20 08:00 - 14 May 20 16:00 Refer to Lab Manual

**Weight:** 10%

**Marked out of:** 10

**Task Description:**

One formal laboratory report will be due in week 11. The subject of the report is the experimental work carried out on "*COMT and Human Personality*" (undertaken in Laboratory classes 1-7 inclusive). Please use the template provided on Learning@Griffith. Clear, concise reports will be regarded highly. Detailed Marking Criteria has been provided in Appendix 6 of the laboratory manual.

**Criteria & Marking:**

Students will be marked on the Title, Abstract, Introduction, Methods, Results, Discussion, Conclusion and Presentation. Detailed Marking Criteria has been provided in Appendix 6 of the laboratory manual.

**Submission:** Other. Laboratory Report should be handed in at the usual laboratory class in week 11.

**This assessment item:**

- is a school based activity
- is an individual activity
- does not include a self assessment activity
- does not have a re-attempt provision

**Title:** End of Trimester Exam

**Type:** Exam - selected and constructed responses

**Learning Outcomes Assessed:** 1, 3, 4, 5, 6

**Due Date:**

Examination Period

**Weight:** 45%

**Marked out of:** 120

**Duration:** 210 minutes

**Format:** Online

**Task Description:**

End of Trimester Examination

**Criteria & Marking:**

This assessment item is designed to assess the knowledge and understanding of the core concepts covered throughout the trimester. All content addressed from week one through to week thirteen inclusive will be examined, with more emphasis on content from week seven onwards. Content covered in laboratories will also be assessed; including problem solving activities and analysis of experiments. The exam will consist of definitions, multiple-choice questions, and a number of written questions.

**This assessment item:**

- is a centrally organised activity
- is an individual activity
- does not include a self assessment activity
- is a non-standard duration examination

## 5.3 Late Submission

An assessment item submitted after the due date, without an approved extension, will be penalised. The standard penalty is the reduction of the mark allocated to the assessment item by 5% of the total weighted mark for the assessment item, for each working day that the item is late. A working day will be defined as Monday to Friday. Assessment items submitted more than five working days after the due date will be awarded zero marks. To understand how the mark is reduced please refer to [Assessment Submission and Return Procedures](#)

## 5.4 Other Assessment Information

### Griffith University Disclosure Statement

*The University shall provide reasonable adjustments to assessment for students with disabilities consistent with the Disabilities Standards for Education 2005, while maintaining the academic integrity of its programs. Adjustments shall be made on an individual basis. Please refer to this policy as it sets out the principles and processes that guide the University [Reasonable Adjustments for Assessment - Students with Disabilities](#)*

**Supplementary Assessment** is available in this course in accordance with [Section 8 of the University Assessment Policy](#). To achieve a Pass grade for the course a pass mark for the supplementary assessment item must be achieved. Students are required to submit all assessment items for this course to be eligible for a supplementary assessment.

### Final Grades

A student's final grade for this course will be based on the aggregation and weighting of marks across assessment, any mandatory pass components and grade cut-offs. Grade cut-offs can vary, so you will need to wait for the official release of grades to be sure of your grade for this course.

- This course is a graded course (i.e 7, 6, 5, 4, 3, 2, 1).

## 6. Policies & Guidelines

This section contains the details of and links to the most relevant policies and course guidelines. For further details on University Policies please visit the [Policy Library](#)

### 6.1 Assessment Related Policies and Guidelines

#### University Policies & Guidelines

The University's assessment-related policies can be found in the [Griffith Policy Library](#).

The Assessment policy covers topics including: assessment requirements; award of grades; supplementary assessment; special consideration; extensions and deferred assessment; conduct of students in examinations; cheating; plagiarism; notification of results; appeals against the award of grades.

#### Academic Integrity

Student academic misconduct encompasses all behaviour:

- involving the misrepresentation of academic achievement; or
- undermining the core values (honesty, trust, fairness, respect and responsibility) of academic integrity; or
- breaching academic integrity;

whether intentional or unintentional. Student academic misconduct includes doing as well as attempting to do any of the acts, omissions or things that constitute academic misconduct.

Student academic misconduct is defined in the [Institutional Framework for Promoting Academic Integrity among Students](#).

Please also refer to the [Student Academic Misconduct Policy](#).

#### Reasonable Adjustments for Assessment - Students with Disabilities Policy

The [Reasonable Adjustments for Assessment - Students with Disabilities](#) Policy sets out the principles and processes that guide the University in making reasonable adjustments to assessment for students with disabilities while maintaining the academic integrity of its programs.

#### Griffith University Disclosure Statement

The [Griffith University Disclosure Statement](#) has been developed to identify and negotiate whether necessary and reasonable accommodations and adjustments can be made, wherever possible, to enable students with disabilities and/or health conditions to undertake required learning activities. Course Convenors are encouraged to reference the Griffith University Disclosure Statement in the Learning Activities and Assessment Plan sections of their course profiles.

#### Assessment, how to submit an assignment and exams, viewing your grades

All you need to know about [assessment, exams and grades](#)

#### Text Matching Software

The University uses text matching software. Students should be aware that your Course Convenor may use software to check submitted assessment tasks. If this is the case, your Course Convenor will provide more detailed information about how the software will be used for individual assessment items.

#### Related links:

- [Academic Integrity website](#)
- [Academic Standing, Progression and Exclusion Policy](#)
- [Assessment Policy](#)
- [Assessment Submission and Return Procedures](#)
- [End of Trimester Centrally Administered Examinations Policy and Procedures](#)
- [Governance of Assessment and Academic Achievement Standards](#)
- [Standards for First Year Assessment](#)
- [Institutional Framework for Promoting Academic Integrity among Students](#)
- [Student Academic Misconduct Policy](#)

### MSC School of Medical Science

#### Assessment Guidelines

The American Psychological Association Referencing Style (6<sup>th</sup> Edition) [APA 6] is the preferred standard for foundation courses in the School of Medical Science - for all other courses, please contact the school.

### 6.2 Other Policies and Guidelines

#### University Policies and Guidelines

Students are responsible for ensuring that they have read all sections of the Course Profile for the course/s in which they are enrolled in any enrolment period. The published online version of the Course Profile is the authoritative version and by the publication of the Course Profile online, the University deems the student has been notified of and read the course requirements. Variations to the Course Profile during the trimester of offer are not permitted except in exceptional circumstances and will be advised in writing to all enrolled students and via the [Learning@Griffith](#) website. Additional information regarding the content of this course may be published on the [Learning@Griffith](#) website.

#### Copyright matters

Copyright applies to all teaching materials and materials generated by students which substantially relate to Griffith University courses. *Students are warned against selling Griffith University teaching materials and their student notes online through commercial websites during and after their studies.* You will almost certainly be in breach of copyright law and Griffith's IT Code of Practice if you post these materials on the internet and commercial websites. Please refer to the [Copyright Guide for Students](#) for further information.

#### Health and Safety

Griffith University is committed to providing a safe work and study environment. However, all students, staff and visitors have an obligation to ensure the safety of themselves and those whose safety may be affected by their actions. Staff in control of learning activities will ensure as far as reasonably practical, that those activities are safe and that all safety obligations are being met. Students are required to comply with all safety instructions and are requested to report safety concerns to the University.

General health and safety information is available on the [Health, Safety and Wellbeing](#) website.

**Other Key Student-Related Policies**

All University policy documents are accessible to students via the [Griffith Policy Library](#) and links to key policy documents, in addition to those listed in 6.1 above, are included below for easy reference:

- [Student Communications Policy](#)
- [Health and Safety Policy](#)
- [Student Administration Policy](#)
- [Student Charter](#)
- [Student Review and Appeals Policy](#)
- [Student Review and Appeals Procedures](#)
- [Student Complaints Policy](#)

# Learning Summary

Below is a table showing the relationship between the learning outcomes for this course, the learning activities used to develop each outcome and the assessment task used to assess each outcome.

## Learning Outcomes

After successfully completing this course you should be able to:

- 1 Explain the basic concepts of genetics including Mendelian, medical, population, evolutionary, and molecular genetics
- 2 Demonstrate basic laboratory skills in current molecular genetics techniques and working in pairs or small groups, apply those skills to practical problems in a laboratory setting.
- 3 Integrate practical skills with theoretical knowledge of molecular genetics to solve real-life problems or make predictions based on acquired knowledge.
- 4 Analyse experimental data relating to molecular genetics techniques and communicate results by a written report
- 5 Demonstrate an understanding of the technological advances in the science of genetics at the molecular and cellular levels.
- 6 Demonstrate an understanding of the important ethical issues surrounding gene technology and present arguments for and against.
- 7 Evaluate the literature in a particular focus area of contemporary genetic research and summarise and present findings.
- 8 Participate in group work and communicate effectively orally and using multimedia to a group of peers
- 9 Work productively in a laboratory setting by demonstrating preparation, participation, professionalism and safe work practices.

## Assessment & Learning Activities

LEARNING ACTIVITIES	LEARNING OUTCOMES								
	1	2	3	4	5	6	7	8	9
Week 1 (Lecture)	●								
Week 2 (Lecture)	●								
Week 3 (Lecture)	●				●				
Week 4 (Lecture)	●								
Week 5 (Lecture)	●				●				
Week 6 (Exam)	●								
Week 7 (Lecture)	●								
Week 8 (Lecture)	●								
Week 9 (Lecture)	●								
Week 10 (Lecture)	●				●	●			
Week 11 (Lecture)	●								
Week 12 (Lecture)	●								
Week 2 (Laboratory)		●	●	●					
Week 3 (Laboratory)		●	●	●					

LEARNING ACTIVITIES	LEARNING OUTCOMES									
	1	2	3	4	5	6	7	8	9	
Week 4 (Laboratory)		•	•	•						
Week 5 (Laboratory)		•	•	•						
Week 6 (Laboratory)		•	•	•						
Week 7 (Laboratory)		•	•	•			•			
Week 8 (Laboratory)		•	•	•						
Week 9 (Laboratory)					•	•	•	•	•	
Week 10 (Laboratory)					•	•	•	•	•	
Week 11 (Laboratory)					•	•	•	•	•	
<b>ASSESSMENT TASKS</b>										
Laboratory Competency Assessment		•	•	•					•	
Laboratory Quizzes	•	•	•							
Mid trimester exam	•									
Laboratory Presentation					•	•	•	•		
Laboratory Report	•	•	•	•						
End of Trimester Exam	•		•	•	•	•				

## Graduate Attributes

For further details on the Griffith Graduate please [click here](#)

Griffith University prepares influential graduates to be:

- [Knowledgeable and skilled, with critical judgement](#)
- [Effective communicators and collaborators](#)
- [Innovative, creative and entrepreneurial](#)
- [Socially responsible and engaged in their communities](#)
- [Culturally capable when working with First Australians](#)
- [Effective in culturally diverse and international environments](#)

This table demonstrates where each of the Griffith Graduate Attributes is taught, practised and assessed in this course.

University wide attributes

GRADUATE ATTRIBUTE	TAUGHT	PRACTISED	ASSESSED
Knowledgeable and skilled, with critical judgement	•	•	•
Effective communicators and collaborators	•	•	•
Innovative, creative and entrepreneurial			
Socially responsible and engaged in their communities	•		
Culturally capable when working with First Australians			
Effective in culturally diverse and international environments			