

| Course Code: | FND004 |
|---------------------|---|
| Course Name: | Human Biology |
| Trimester: | Trimester 1, 2019 |
| 8Programs: | Foundation Program |
| Credit Points: | 10 Credit Points, 1 semester, Elective Course |
| Course Coordinator: | Alastair McWhir |
| Document modified: | 1/05/2018 |

Teaching Team

Your teacher can be contacted via the email system on the portal.

Alastair McWhir: alastair.mcwhir@staff.griffithcollege.edu.au

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Staff Consultation

Your teacher is available each week for consultation outside of normal class times. Times that your teacher will be available for consultation will be given in the first week of classes. A list of times and rooms will be published on the Griffith College Portal under the "myTimetable" link.

Prerequisites

There are no prerequisites for this course.

Brief Course Description

The course focuses on the development of a broad scientific knowledge of the living world as well as focusing on concepts relating to concepts relating to biological structure, function, diversity, distribution, genetics, and interactions of living organisms.

Rationale

The course provides important underpinning knowledge for those students progressing to further studies in the health programs.

Aim

The purpose of the module is to develop and demonstrate specialized knowledge and skills in the physiology and anatomy of the human body. The students will develop cognitive skills to identify, analyse and compare a range of biological concepts.

Learning Outcomes

Upon successful completion of this course, you will be able to:

- 1. Demonstrate an understanding of the characteristics of a living organism and food categories in order to develop a broad perspective on human biology and functions;
- 2. Demonstrate an understanding of the cell and functions of the organelles, in order to reflect upon main differences between plant and animal cells;
- 3. Demonstrate an understanding of the the respiratory system as a whole as well as the individual parts to explain ventilation and describe the causes, symptoms and treatments for a range of respiratory diseases;
- 4. Demonstrate an understanding of the areas of the heart, blood vessels and blood groups and relate them to the purpose of the pulse, the various parts of the heart, composition of blood and its functions to be able to recognise the symptoms of simple diseases of the blood;
- 5. Demonstrate an understanding and label the respiratory system, parts of the human skeleton, nephron, liver and pancreas in order to outline the processes of excretion, homeostasis, filtration, absorption and formation of urine;
- 6. Communicate effectively in a variety of text types using appropriate anatomical language.

Texts and Supporting Materials

Recommended Texts/Resources:

• OpenStax, Concepts of Biology. OpenStax. Jan 20, 2017.

Available for free at http://cnx.org/contents/s8Hh0oOc@9.21:Pj8cW7X1@4/Introduction

• Open Stax, *Microbiology*. OpenStax. 02 November 2016.

Available for free at https://openstax.org/details/books/microbiology#resources

Open Stax, Anatomy and Physiology. OpenStax CNX. Feb 8, 2017 http://cnx.org/contents/14fb4ad7-39a1-4eee-ab6e-3ef2482e3e22 @8.79.

Available for free at http://cnx.org/contents/FPtK1zmh@8.79:zMTtFGyH@4/Introduction

Other Resources:

The Human Body Parragon Books (July 12, 2012)

Huxley, L.M. (Lorraine M.). Biology: an Australian perspective 2nd ed. Oxford University Press (2005)

- App: Animated Essential Atlas of Anatomy by Focus Medica Medical (Free)
- App: Anatomy & Physiology I & II by 8bittoast, LLC Medical (Free)

Organisation and Teaching Strategies

Contact hours

The expected contact hours per week for this course comprises of:

| Formal classes | Formal Homework | Online Learning | Supervised Consultation | Total |
|----------------|--------------------|--------------------|----------------------------|----------|
| 4 hours | 4 hours | 1 hour | 1 hour | 10 hours |

Class Contact Summary

Attendance:

Your attendance in class will be marked twice during a four hour class. To receive full attendance, you must be present in the classroom on both occasions. Therefore, you are encouraged to actively participate in all class sessions.

Participation in Class:

It is extremely important that you seek to actively participate in all classes throughout the semester. Opportunities to self-correct your work will be available which will aid your learning over the course of the semester.

Consultation Time:

Consultation time is offered on a weekly basis in order to support student learning. Please refer to the student portal or your teacher for details.

Independent Learning:

Throughout this course you will be encouraged to take personal responsibility for managing your own learning and your own time. In addition to the 4 hours spent in class time for this course you are expected to undertake independent study outside of class time. This independent learning will involve reading and preparing for classes and completing assignments and other assessment tasks. There will be the opportunity to use online resources via the Griffith College portal in order to enhance your learning.

Program Progression:

You are reminded that satisfactory Program Progression requires that attendance in classes is maintained at equal to or greater than 80%, and that GPA is maintained at equal to or greater than 3.5 [please see Griffith College Policy Library - Program Progression Policy - for more information].

Content Schedule

Weekly Teaching Schedule

| Week | Topic | Activity | Learning Outcome |
|-------------------|---|--|---|
| 1 | Introduction to the Human Biology course Introduction to Human Biology | Introduction to course assessment and Laboratory activities The Human: An Orientation Worksheet on anatomical terms Worksheet on microscope usage | Students are introduced to basic characteristics of a living organism (1). Students complete laboratory safety instruction |
| 2 | Laboratory class 1 | • Lab 1 (4hr) | Students demonstrate specialized knowledge and skills in the physiology and anatomy of the human body (1 – 6) |
| Makeup Lecture | Introduction to the Respiratory system | Respiratory system and breathing Gas transport and respiratory control | Students explain ventilation and describe the causes, symptoms and treatments for a range of respiratory diseases (3). |
| Makeup Lecture | Introduction to the Circulatory system | Blood and blood vessels The Heart | Students explain areas of the heart, blood vessels and blood groups (4). |
| 3 | Laboratory class 2 | • Lab 2 (4hr) | Students demonstrate specialized knowledge and skills in the physiology and anatomy of the human body (1 – 6) |
| 4 | Respiratory system Circulatory system continued. Introduction to Human system interactions | Worksheet Labelling of respiratory system diagram and functions of parts Worksheet Labelling of Circulatory system | Students are introduced to basic characteristics of a living organism (1). |
| 5 | Digestive system | The GUT and Digestion Worksheet Labelling of digestive system | Students describe the functions of the liver, pancreas, and gall bladder (3) |
| 6 | Regulation | Homeostasis and the Urinary system Worksheet Practice labelling diagrams and stating functions of parts | Students outline the processes of excretion, homeostasis, filtration, absorption and formation of urine (5). |
| 7 | No Class Anzac Day Holiday | Student work on their research assignment in their own time | 6. Communicate effectively in a variety of text types using appropriate anatomical language |
| 8 | Skeletal system | The Human skeleton - bones and muscles Worksheet Practise labelling diagrams and state functions of parts The Human skeleton - bones and muscles and muscles | Students identify and label the parts of the Human Skeleton (5) |
| 9 | Introduction to cells | Cell structure and function | Students identity and analyse the cell (2). |
| 10 | Cell biology I | Worksheet Labelling cell structures and describing function of organelles | Students identity and analyse the cell (2). |
| 11 | Cell biology II | Protein synthesis. Meiosis and Genetics | Students reflect upon animal cells. (2) |

| | | Worksheet Labelling Protein synthesis, Mendel crosses, mitosis, meiosis | |
|----------|-----------------|---|-------------------|
| 12 | Course Revision | In-class revision | In-class revision |
| 13 or 14 | Final Exam | | |

Assessment

This section sets out the assessment requirements for this course.

Summary of Assessment

| Item | Assessment Task | Weighting | Relevant Learning Outcomes | Due Date |
|------|---|-----------|----------------------------|------------------|
| 1 | Quiz 1 | 10% | 1, 2, 7 | Week 6 |
| 2 | Quiz 2 | 10% | 3, 4, 5, 7 | Week 9 |
| 3 | Human Biology Research Class Forum | 20% | 1 - 7 | Week 2 - 10 |
| 4 | Workbook including Laboratory Report | 30% | 1 - 7 | Week 2 -11 |
| 5 | Final Exam | 30% | 1 - 7 | Week 13 or 14 |

Assessment Details

You will demonstrate understanding of the concepts taught in the course through a variety of assessment instruments.

Quiz 20%

The two (2) quiz tests will be online of short answer and multiple choice questions. They will test the theoretical knowledge of the students and ask them to apply that theory to actual examples of human biological problems. You will be able to attempt practice tests on the Griffith College Student Portal prior to the online quiz.

Human Biology Research Class Forum 20%

You will need to identify a basic human biological concepts that relates to the physiology and anatomy of the human body and describe the current state of research into the chosen concept. .

You will, as part of a class group, create an annotated bibliography of research that will be hosted using a class Forum.

Workbook including Individual laboratory report 30%

Throughout the trimester you will be required to complete homework each week. Some of this work will be done in class. You are required to complete all tasks and show your ability to make notes and link the ideas learned in class to experiences and ideas you already have. Marks will be given for the completion of in class / homework and the quality of your answers.

You will create a written laboratory report based on laboratory activities. You will need to identify a basic human biological concept and describe to the class how that concept relates to the physiology and anatomy of the human body. The students will receive a marking rubric specifying the criterion and standards for the presentation in Week 2 via the Griffith College Student Portal.

Final Exam 30%

The final exam will be 2 hours in duration and may contain a mixture of multiple choice questions, short answer and extended response questions. The final exam will be held during the final examination period in either Week 13 or 14 as per the final examination timetable. For the final exam, students will be provided with test exemplars and model answers which outline the standards for obtaining marks.

Satisfactory completion of the course

To satisfactorily complete the course, you must achieve a minimum overall mark of 50%.

PLEASE NOTE: Assignments are required to be submitted to Turnitin. Failure to obtain and attach a satisfactory Originality Report will mean that the assignment will not be marked and a score of zero will be recorded for the assignment. Detailed instructions and a Marking Guide will be provided during the semester. Late submissions will attract a penalty as described in the Assessment policy.

Internal moderation and benchmarking processes

All assessment will be set by teaching staff with a collaborative approach that includes peer review and approval by the appropriate Program Convenor. Significant pieces of assessment in the course are internally moderated in a collaborative manner by relevant teaching staff to ensure that the criteria and standards are correctly and consistently applied. Before Final Exams are marked, teachers conduct sample marking to ensure that the criteria and standards are correctly and consistently applied. In addition, benchmarking of the final exam in each course is undertaken by an external person (usually a lecturer in a similar Diploma level course). The benchmarking report provided by the external lecturer informs continuous improvement practices for the subsequent semester.

Specialist Facilities

| Facilities and Resources | Specific Resources required |
|---|--|
| Indicate any specific facilities and resources required for delivery of this subject. | None |
| Indicate any specific learning resources required for this subject | Learning resources include: textbook, Portal materials |
| Indicate any specific IT or electronic learning resources required for this subject | Computer (internet), projector. |

Retention of Originals

You must be able to produce a copy of all work submitted if so requested. Copies should be retained until after the release of final results for the course.

Extensions

To apply for an extension of time for an assessment item you must submit a written request to your lecturer via the Student Website at least 48 hours before the date the assessment item is due. Grounds for extensions are usually: serious illness, accident, disability, bereavement or other compassionate circumstances and must be able to be substantiated with relevant documentation [e.g. medical certificate]. Please refer to the Griffith College website - Policy Library - for guidelines regarding extensions and deferred assessment.

Penalties for late submission without an approved extension

Penalties apply to assignments that are submitted after the due date without an approved extension. Assessment submitted after the due date will be penalised 10% of the TOTAL marks available for assessment (not the mark awarded) for each day the assessment is late. Assessment submitted more than five days late will be awarded a mark of zero (0) For example:

- > 5 minutes and <= 24 hours 10%
- > 24 hours and <= 48 hours 20%
- > 48 hours and <= 72 hours 30%
- > 72 hours and <= 96 hours 40%
- > 96 hours and <= 120 hours 50%
- > 120 hours 100%

Note:

- Two day weekends will count as one day in the calculation of a penalty for late submission.
- When a public holiday falls immediately before or after a weekend, the three days will count as one day in the calculation of a penalty for late submission.
- When two public holidays (e.g. Easter), fall immediately before or after, or one day either side of a weekend, the four days will count as two days in calculating the penalty for late submission.
- When a single public holiday falls mid-week, the day will not be counted towards the calculation of a penalty.

Please refer to the Griffith College website - Policy Library > Assessment Policy for guidelines and penalties for late submission.

Assessment Feedback

Marks awarded for assessment items will be available on the on-line grades system on the Student Website within fourteen [14] days of the due date.

Generic Skills

Griffith College aims to develop graduates who have an open and critical approach to learning and a capacity for lifelong learning. Through engagement in their studies, students are provided with opportunity to begin the development of these and other generic skills.

Studies in this course will give you opportunities to begin to develop the following skills:

| Generic Skills | Taught | Practised | Assessed |
|----------------------------------|--------|-----------|----------|
| Written Communication | | Yes | Yes |
| Oral Communication | | Yes | Yes |
| Information Literacy | | Yes | Yes |
| Secondary Research | | Yes | Yes |
| Critical and Innovative Thinking | | Yes | Yes |
| Academic Integrity | Yes | Yes | Yes |
| Self-Directed Learning | | Yes | |
| Team Work | | Yes | Yes |
| Cultural Intelligence | | | |
| English Language Proficiency | | | |

Additional Course Information

Learning Support

In addition to formal contact hours, you are provided with extra support through individual consultation with teaching staff, English language support, and self-access computer laboratories.

Griffith College is committed to providing additional academic assistance to students to maximise their opportunity to successfully complete courses of study. Learning Advisors conduct regular workshops in skill areas essential to studies. These include: time management, goal setting, essay preparation, examination techniques, academic writing skills and maths. Further information on programs available can be accessed on

the Griffith College 'Support' tab on the Portal (http://studentsupport.griffithcollege.qld.edu.au/) or by asking the Griffith College staff on reception.

Teacher and Course Evaluations

Student feedback is respected and valued by teachers and the College. Students are encouraged to provide their thoughts on the course and teaching, both positive and critical, directly to their teacher or by completing course and teacher evaluations.

Academic Integrity

Griffith College is committed to maintaining high academic standards to protect the value of its qualifications. Academic integrity means acting with the values of honesty, trust, fairness, respect and responsibility in learning, teaching and research. It is important for students, teachers, researchers and all staff to act in an honest way, be responsible for their actions, and show fairness in every part of their work. Academic integrity is important for an individual's and the College's reputation.

All staff and students of the College are responsible for academic integrity. As a student, you are expected to conduct your studies honestly, ethically and in accordance with accepted standards of academic conduct. Any form of academic conduct that is contrary to these standards is considered a breach of academic integrity and is unacceptable.

Some students deliberately breach academic integrity standards with intent to deceive. This conscious, premeditated form of cheating is considered to be one of the most serious forms of fraudulent academic behaviour, for which the College has zero tolerance and for which penalties, including exclusion from the College, will be applied.

However, Griffith College also recognises many students breach academic integrity standards without intent to deceive. In these cases, students may be required to undertake additional educational activities to remediate their behaviour and may also be provided appropriate advice by academic staff.

As you undertake your studies at Griffith College, your lecturers, tutors and academic advisors will provide you with guidance to understand and maintain academic integrity; however, it is also your responsibility to seek out guidance if and when you are unsure about appropriate academic conduct.

Please ensure that you are familiar with the <u>Griffith College Academic Integrity Policy</u>; this policy provides an overview of some of the behaviours that are considered breaches of academic integrity, as well as the penalties and processes involved when a breach is identified.

For further information please refer to the Academic Integrity Policy on the Griffith College website – Policy Library.

Risk Assessment Statement

There are no out of the ordinary risks associated with this course.

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