

## EPBIOL 259: Introductory Human Bioscience

Callaghan

Semester 2 - 2023



THE UNIVERSITY OF  
NEWCASTLE  
AUSTRALIA

*The Pathways and Academic Learning Support Centre recognises and respects the unique history and culture of Aboriginal and Torres Strait Islander peoples and their unbroken relationship with the lands and the waters of Australia over millennia. We are dedicated to reconciliation and to offering opportunities for Aboriginal and Torres Strait Islander peoples to access and succeed in higher education. The Centre is committed to providing a culturally safe and inclusive environment for all.*

## OVERVIEW

<b>Course Description</b>	Introductory Human Bioscience introduces students to concepts of relevance to the study of undergraduate human anatomy and physiology. Topics include an introduction to anatomy and physiology (medical terminology, directional terms and body planes), homeostasis, the components and functions of cells, cellular transport mechanisms, tissues and organs, body systems, body functions and important biochemical reactions. Students will develop skills in observation, critical thinking, research and communication.
<b>Requisites</b>	If you have successfully completed or are enrolled in EPCHEM314, EPHLTH270 or EPHLTH370 you cannot enrol in this course.
<b>Contact Hours</b>	<b>Laboratory</b> Face to Face On Campus 2 hour(s) per Term Full Term  <b>Lecture</b> Face to Face On Campus 2 hour(s) per Week for 12 Weeks  <b>Tutorial</b> Face to Face On Campus 1 hour(s) per Week for 11 Weeks
<b>Unit Weighting</b>	10
<b>Workload</b>	Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

# COURSE OUTLINE

[www.newcastle.edu.au](http://www.newcastle.edu.au)

CRICOS Provider 00109J

# CONTACTS

## Course Coordinator

Zlata (Zee) Johnson (she/her)  
[Zlata.Johnson@newcastle.edu.au](mailto:Zlata.Johnson@newcastle.edu.au)

Consultation: Please email me with any issues / queries anytime. Alternatively, feel free to approach me with questions before / after lectures, tutorials, or drop-ins on campus.

## Teaching Staff

Other teaching staff will be advised on the course Canvas site.

## School Office

<b>Callaghan</b> Ground Floor, General Purpose Building (GP) Ph: 02 4921 5558 <a href="mailto:enabling@newcastle.edu.au">enabling@newcastle.edu.au</a>	<b>Ourimbah</b> HO 168, Humanities Building Ph: 02 4348 4076 <a href="mailto:enabling@newcastle.edu.au">enabling@newcastle.edu.au</a>
---	--

# SYLLABUS

## Course Content

- Introduction to the study of anatomy and physiology
- Cellular organisation I: structure and membrane transport
- Cellular organisation II: protein synthesis and mitosis
- Tissue level of organisation
- Skeletal system
- Muscular system
- Nervous system
- Endocrine system
- Cardiovascular system I: blood
- Cardiovascular system II: heart and blood vessels
- Lymphatic and immune system
- Respiratory system
- Digestive system and metabolism

## Course Learning Outcomes

**On successful completion of this course, students will be able to:**

1. Express scientific ideas in a logical, concise and coherent fashion.
2. Communicate scientific ideas.
3. Use scientific method in practical contexts.
4. Solve simple problems in both practical and theoretical contexts.
5. Identify and choose appropriate sources of scientific information using the library catalogue.
6. Prepare a scientific report to address a scientific question, citing the sources of information using the specified referencing format.

## Course Materials

Lecture materials and tutorial worksheets will be provided on the course Canvas site.

### Recommended text (this is not required to be purchased)

Saladin, K.S., McFarland, R.K. (2022). ***Essentials of anatomy and physiology***. Third edition. McGraw-Hill Education. New York.

# SCHEDULE

Week	Week Begins	Topic	Learning Activity	Reading	Assessment Due
1	17 Jul	Introduction to the study of anatomy and physiology		Chapter 1	
2	24 Jul	Cellular Organisation I: structure and membrane transport	Tutorial 1	Chapter 2 Chapter 3	Quiz 1 due by 11:59pm on Sun 30 Jul
3	31 Jul	Cellular Organisation II: protein synthesis and mitosis	Tutorial 2	Chapter 2 Chapter 3	Quiz 2 by 11:59pm Sun 6 Aug
4	7 Aug	Tissue level of organisation	Tutorial 3	Chapter 4	Quiz 3 by 11:59pm Sun 13 Aug
5	14 Aug	Skeletal system Muscular system	Tutorial 4	Chapter 6 Chapter 7	Quiz 4 by 11:59pm Sun 20 Aug
6	21 Aug	Nervous system	Tutorial 5	Chapter 8	<b>Mid-Semester Exam (15%)</b> Quiz 5 by 11:59pm Sun 27 Aug
7	28 Aug	Endocrine system	Tutorial 6	Chapter 11	Quiz 6 by 11:59pm Sun 3 Sep
8	4 Sep	Cardiovascular system I: Blood	Tutorial 7	Chapter 12	Quiz 7 by 11:59pm Sun 10 Sep
9	11 Sep	Cardiovascular system II: Heart and blood vessels	Tutorial 8	Chapter 13	Quiz 8 by 11:59pm Sun 17 Sep
10	18 Sep	Lymphatic and immune system	Tutorial 9	Chapter 14	<b>Research Assignment due (20%)</b> Quiz 9 by 11:59pm Sun 24 Sep
<b>Mid Term Break</b>					
<b>Mid Term Break</b>					
11	9 Oct	Respiratory system	Tutorial 10	Chapter 15	Quiz 10 by 11:59pm Sun 15 Oct
12	16 Oct	Digestive system & Metabolism	Tutorial 11 Tutorial 12	Chapter 17 Chapter 18	Quiz 11 by 11:59pm Sun 22 Oct
13	23 Oct	Practical LABS			<b>Lab Report due (10%)</b> Quiz 12 by 11:59pm Sun 29 Oct
<b>Examination Period</b>					
<b>Examination Period</b>					

# ASSESSMENTS

This course has 5 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Online Quizzes	11:59pm Sunday(s) Weeks 2-13	Individual	15%	4
2	Mid-Semester Test	11:59pm Sunday 27 Aug 2023 (end Week 6)	Individual	15%	1, 2, 4
3	Laboratory Report	Week 13 Details to be announced in Canvas	Individual	10%	1, 2, 3, 4
4	Research Assignment	11:59pm Sunday 24 Sep 2023 (end Week 10)	Individual	20%	1, 2, 5, 6
5	Final Examination	During University's Formal Examination Period (Mon 30 Oct to Sat 11 Nov 2023)	Individual	40%	1, 2, 4

## Late Submissions

The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 5% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

---

## Assessment 1 - Online Quizzes

Assessment Type	Quiz
Description	<p>Online Quizzes are used to assess your knowledge of key scientific concepts important to your understanding of Introductory Human BioScience. Quizzes are scheduled in such a way to allow you to learn course material sequentially throughout the semester.</p> <p>Twelve (12) online quizzes will be completed via Canvas – one per week of semester starting in Week 2. Your combined results from these quizzes will contribute to a total of 15% of your final grade / mark.</p> <p>Each quiz consists of 10 multiple-choice questions (MCQs) based on material contained in the previous week's lectures, tutorials and textbook readings.</p> <p>Quizzes will become available at 12:00am each Monday(s) from Week 2 of semester and will remain open for the week – closing at 11:59pm Sunday(s). Each quiz must be completed in 20 minutes and can be attempted twice with your highest mark contributing to your final grade.</p> <p><u>PLEASE NOTE:</u> Each Quiz will LOCK at 11:59pm on the specified DUE DATE (see <i>SCHEDULE in this Course Outline</i>). Quizzes are offered on a course (not individual) basis. Once locked, quizzes cannot be reopened and will not be able to be completed after that time. Students unable to complete quizzes due to adverse circumstances should contact the Course Coordinator <u>PRIOR</u> to quiz shutdown dates.</p>
Weighting	15%
Due Date	End of Weeks 2 through 13
Submission Method	ONLINE via Canvas
Assessment Criteria	Correct answers
Return Method	ONLINE
Feedback Provided	Marks will be released via Grades in Canvas

## Assessment 2 - Mid-Semester Exam

Assessment Type	In Term Test
Description	<p>The mid-semester exam will test and assess your understanding of course material covered in lectures, tutorials and readings from <b><u>Weeks 1–5</u></b>. It will provide feedback and guidance on the effectiveness of study methods and knowledge of the course content. This is particularly useful for students who have not studied for a number of years.</p> <p>This is a 60 minute <b>open-book exam</b> and will be <b>held online in Week 6</b>. Answers must be your own and copying and pasting from other sources is NOT permitted. The exam consists of both multiple-choice questions (MCQs) <b>AND</b> short answer questions (SAQs) based on content covered in Weeks 1 through 5 inclusive.</p>
Weighting	15%
Due Date	Week 6
Submission Method	ONLINE via Canvas
Assessment Criteria	Correct answers
Return Method	Not Returned
Feedback Provided	ONLINE via Grades in Canvas

---

## Assessment 3 - Laboratory Report

<b>Assessment Type</b>	Tutorial / Laboratory Exercises
<b>Description</b>	<p>The experiments in these practical labs aim to develop lab skills associated with the theoretical concepts of anatomy and physiology as they relate to human biological and biomedical sciences.</p> <p>Students will participate in a two (2) hour laboratory session in Week 13. Practical activities are related to theory taught during the course. During the practical session, students are required to complete a laboratory report as they undertake the practical experiments. This report will be collected at the end of the lab session for marking. Further details will be provided prior to Week 13, including information about lab inductions and reminders about WHS requirements.</p> <p>Students unable to attend the lab in person due to adverse circumstances should contact the Course Coordinator <u>PRIOR</u> to the lab session.</p>
<b>Weighting</b>	10%
<b>Due Date</b>	Week 13
<b>Submission Method</b>	In laboratory / class
<b>Assessment Criteria</b>	Correct answers and completed practical tasks
<b>Return Method</b>	Not returned
<b>Feedback Provided</b>	ONLINE via Grades in Canvas

## Assessment 4 - Research Assignment

<b>Assessment Type</b>	Written Assignment
<b>Description</b>	<p>The aim of this written assessment task is to develop and assess your critical thinking, academic writing and independent research skills. This includes your ability to locate, collate and evaluate relevant health science knowledge and data. You will develop skills in database searching, referencing and writing structured academic reports.</p> <p>Students will prepare a written, research-based and referenced scientific report. All assignments <b>MUST</b> be fully referenced using APA7 referencing style and be submitted online via Canvas for grading.</p> <p>Further information will be given about this assignment throughout the course. Marking criteria will be available in Canvas, as well as referencing information and access to library assistance to help you complete this assignment. Prior to submission, the research assignment <b>MUST</b> be submitted to TURNITIN, to check for inadvertent plagiarism. Information about TURNITIN can be found at the following link: <a href="http://www.newcastle.edu.au/unit/centre-for-teaching-and-learning/uonline/turnitin-for-students.html">http://www.newcastle.edu.au/unit/centre-for-teaching-and-learning/uonline/turnitin-for-students.html</a>.</p>
<b>Weighting</b>	20%
<b>Due Date</b>	11:59pm on Sunday 24 September 2023 (end of Week 10)
<b>Submission Method</b>	ONLINE via Canvas
<b>Assessment Criteria</b>	A marking rubric will be made available in the "Assessments" menu area on Canvas
<b>Return Method</b>	ONLINE via Canvas
<b>Feedback Provided</b>	ONLINE via Grades in Canvas

---

## Assessment 5 - Final Examination

### Assessment Type

Formal Examination

### Description

The purpose of the final examination is to assess your knowledge of the overall course content, giving you the opportunity to demonstrate an understanding of introductory human anatomy and physiology in university examination settings.

Your final exam is a formal examination that will be held in the University Examination Period at the end of the semester (30 Oct to 11 Nov 2023, including Saturdays and evenings).

This is an OPEN BOOK exam. Copying and pasting from online or other sources is NOT permitted. The examination will be based on ALL material covered in lectures, tutorials and textbook readings for the duration of the course and will consist of BOTH multiple-choice questions (MCQs) AND short answer questions (SAQs). You will be given more information about this examination later in the course.

The exact date and time of your exam will be sent to your student email account by the University's Examination Office approximately four (4) weeks before the examination period. The exam will be held online. It is important for you to ensure that you are available to complete the exam at any time during the Examination period.

If you are, or believe you may be, unable to attend a scheduled examination due to an illness or another significant and verifiable reason, you MUST contact the Enabling Pathways Office AND advise your Course Coordinator at the earliest opportunity. Completion of an online Adverse Circumstances (AC) application including appropriate documentation is required.

If you have a permanent or temporary medical condition/disability that requires adjustments or allowances to be made during your examination, you must register with AccessAbility at the start of semester so that these arrangements can be made. Information is available from <https://www.newcastle.edu.au/current-students/support/accessability>.

Please note that all marks and grades released during semester are indicative only until formally approved by the Head of School.

### Weighting

40%

### Due Date

During Formal Exam Period (30 Oct to 11 Nov 2023)

### Submission Method

Formal Exam - ONLINE

### Assessment Criteria

Correct Answers

### Return Method

Not Returned

### Feedback Provided

Not Provided

# ADDITIONAL INFORMATION

## Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

\*Skills are those identified for the purposes of assessment task(s).

## Communication Methods

**Email** is the principal form of communication at the university and within this course. Always use your student email (NUmail), rather than a private email address, and check this regularly. As Course Coordinator I will try to respond to your email within three (3) working days. I will not normally respond to emails over the weekends. Please be courteous in your email communication and in the online space. The University of Newcastle has a [Social Media Communication Guideline](#) that covers all communications in the University for staff and students.

**Canvas** is used to distribute course material, announcements and other information. It is also used for online quizzes and to allow students to track their individual progressive assessment results throughout the semester via Grades. Recordings of the lectures will also be available.

**Discussions:** You can ask questions about minor issues on the Discussion forums. Students are strongly encouraged to use these to communicate with each other, discuss issues relating to the course, and solve minor problems.

## Additional Contact Details

If you have any questions about your course, please speak with your course coordinator, lecturer or tutor first.

For general enquiries, please contact the Pathways and Academic Learning Support Centre Office or your Student Liaison Officer. Additional contacts will be available on your Canvas site.

## Pathways and Academic Learning Support Centre Office

**Callaghan**  
Ground Floor, General Purpose Building (GP)  
Ph: 02 4921 5558  
[enabling@newcastle.edu.au](mailto:enabling@newcastle.edu.au)

**Ourimbah**  
HO 168, Humanities Building  
Ph: 02 4348 4076  
[enabling@newcastle.edu.au](mailto:enabling@newcastle.edu.au)

## Student Liaison Officer

[PALS-SLO@newcastle.edu.au](mailto:PALS-SLO@newcastle.edu.au)

<b>Yapug</b>	<b>Indigenous Enabling Learning Advisor</b> Hannah Pipe Birabahn Building Ph: 02 4921 7952 <a href="mailto:Hannah.Pipe@newcastle.edu.au">Hannah.Pipe@newcastle.edu.au</a>	<b>Program Convenor</b> Dan Collins SAS-217, Birabahn Building Ph: 02 4055 3266 <a href="mailto:Daniel.Collins@newcastle.edu.au">Daniel.Collins@newcastle.edu.au</a>
<b>Attendance and Engagement</b>	<p>In addition to face-to-face hours in class, out-of-class study and related work will require an additional commitment of up to 10 hours per week of reading, preparation, and study time over the semester. Students are required to spend on average 120-140 hours of effort (contact and non-contact including assessment) per semester per 10 unit course.</p> <p>To maximise your learning opportunities, you should read all relevant material prior to attending lectures and tutorials.</p> <p>It is strongly recommended that you attend your lectures and tutorials every week. Our data shows that you will get better results if you attend these classes with your peers. If you do have to miss a class, you should catch up on any missed work by accessing lecture recordings and resources available on your Canvas site. <b>If you cannot attend at least 50% of your tutorials, please contact your Course Coordinator or Student Liaison Officer and discuss the options.</b></p> <p>A plan of regular revision throughout the semester is also strongly recommended to help you manage your time, consolidate information and retain that knowledge for the duration of the course and beyond.</p> <p>Assessment items have been designed to reinforce and revise the course material, and ensure you are up to date with course content. You are required to submit all assessable items by the due dates unless prior arrangements have been made.</p>	
<b>Timetable</b>	Your timetable for this course is available via the myUni Student Portal and can also be found <a href="#">here</a> .	
<b>Software</b>	Free Microsoft Office software is available to enrolled students <a href="#">here</a> and includes 5 TB of free cloud storage with OneDrive.	
<b>Written Assessment Word Limits</b>	Word limits for your written assessments includes headings, sub-heading, in-text citations, quotes and referencing but does not include the list of references, appendices and footnotes. You will not receive a penalty for exceeding the word limit (there is a tolerance of up to 10%), but any work after the maximum word limit may not be included within the allocation of marks.	
<b>Final Examination</b>	<p>This course has a formal examination. All formal examinations will be held during the <a href="#">University's Examination Period</a>. Your <a href="#">exam timetable</a> will be available approximately 4 weeks before the exam period and you must ensure that you are available to undertake your exam at any time during the Examination Period.</p> <p>If you are unable to attend a scheduled examination due to illness or you have another significant, verifiable reason, contact the Pathways and Academic Learning Support Office and advise your lecturer at the earliest opportunity. Completion of an <a href="#">online Adverse Circumstances application</a> including appropriate documentation is required.</p> <p>If you have a permanent or temporary disability or medical condition that means you may need adjustments made during your examination, you must register with <a href="#">AccessAbility</a> at the start of semester so that these arrangements can be made.</p> <p>If you have a Reasonable Adjustment Plan (RAP), your examination will be scheduled in accordance with it. If you are unable to attend your scheduled examination due to illness or other circumstance, you will need to submit an online Adverse Circumstances application and supply appropriate documentation to support your application. Your RAP is not able to be used as your documentation.</p>	



<b>Adverse Circumstances</b>	<p>The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s).</p> <p>Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:</p> <ol style="list-style-type: none"><li>1. the assessment item is a major assessment item; or</li><li>2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;</li><li>3. you are requesting a change of placement; or</li><li>4. the course has a compulsory attendance requirement.</li></ol> <p>Before applying you must refer to the <a href="#">Adverse Circumstances Affecting Assessment Items Procedure</a>.</p> <p>In the Pathways and Academic Learning Support Centre, applications for Adverse Circumstances must be lodged via the online Adverse Circumstances system for all individual assessment items worth 30% or greater.</p>
<b>Oral Interviews (Vivas)</b>	<p>As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the <a href="#">Oral Examination (viva) Procedure</a>. In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the <a href="#">Student Conduct Rule</a>.</p>
<b>Academic Misconduct</b>	<p>All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. Please refer to the <a href="#">Student Academic Integrity Policy</a>.</p>
<b>Student Support</b>	<p>A wide range of help, advice and support sessions will be available during your studies and emails will be sent throughout the semester as a reminder at key times.</p>
<b>Course Evaluation</b>	<p>Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.</p>
<b>Important Policy Information</b>	<p>The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the <a href="#">policies and procedures</a> that support a safe and respectful environment at the University.</p>
<b>Workplace Health &amp; Safety Requirements</b>	<p>Lab gowns, nitrile (non-latex) gloves and safety goggles will be provided to students for practical lab sessions. Masks (optional) will also be provided. To gain entry to laboratories and participate in practical experiments, students must wear enclosed protective shoes with socks (ankles covered), and hair (shoulder-length or longer) must be tied back securely.</p>

*This course outline was approved by the Director, PALS. No alteration of this course outline is permitted without Director approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.*

© 2023 The University of Newcastle, Australia