



COURSE GUIDE 2021

University of Queensland Premedical Society



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Courses recommended for GAMSAT preparation are indicated by underline.

Courses recommended for MD preparation are in blue.

Foreword

The University of Queensland Premedical Society (UQPMS) is proud to present their flagship publication, the UQPMS Course Guide for 2021.

We have continued to update this course guide to provide the most up-to-date and detailed reviews of UQ courses. We hope that premedical students will find some guidance when selecting courses to make the most of their university experience.

We would like to sincerely thank the many UQ students who have generously passed on their invaluable feedback, experiences and advice. The course guide arises as a combination of their efforts. At UQPMS, we are strong believers of the team effort and collaborative learning as we progress into medicine and beyond. We hope to continue fostering this sense of community and support for the years to come.

We acknowledge that UQPMS members engage with a range of disciplines during their undergraduate studies. However, the majority of our members study courses related to biomedical science. As such, most of the courses in this publication are of the biomedical science discipline. In an attempt to account for the diverse academic goals for our members, we have strived to include a number of elective courses outside of the science discipline and highlighted a number of courses noted to be particularly useful for GAMSAT preparation or for future MD study.

If you have found this course guide useful, please consider submitting your own thoughts, reviews, and advice at the end of each semester.

We hope this guide will be of use to you and your studies, and we wish you the best of luck in achieving your academic goals. Please feel free to reach out to us at any time if you have any questions, comments or queries.

On behalf of the University of Queensland Premedical Society,

The UQPMS Executive Team

Course Selection

Throughout your premedical degree, the courses you select will affect the direction of your studies.

Currently, a 2021 premedical study plan is available [here](#), which present a potential course plan for your premedical degree. This plan serves as a good starting point for building your study plan; however, there is space for choice, especially for elective courses that provide you with opportunities to study outside of the science discipline.

Each program of study also offers a course list, which includes the courses available for you to select within that degree. It will also outline which courses need to be completed to satisfy the requirements of the degree. You should always ensure that the courses you select allow you to adhere to the program rules for your chosen degree and major. It is recommended that premedical students include anatomy and pharmacology courses as part of their course selection, in order to best prepare for future study in the MD.

Elective courses are an opportunity to focus on specific topics within your major, or study a field outside of your discipline. Many students, especially in late years, choose to lighten their study load by selecting a lower-level course or a course outside of their discipline. UQ academic advisors are also available for students to contact through their respective faculties.

It is important to note that due to the ongoing COVID-19 pandemic, overseas exchange is unlikely to be available this year. There may be opportunities to study abroad once the pandemic has subsided and international flights are active again. To ease their course selections in overseas institutions, many students 'save' elective units for their exchange semester.

In response to the unique circumstances surrounding the COVID-19 situation, the delivery mode for many courses have changed. The majority of UQ courses are now delivered in flexible or external mode.

Students who are unable to come onto campus for any reason should select courses that offered externally. Flexibly delivered courses normally combine a mix of online and on-campus activities. A select few courses are offered internally only as the course content relies heavily on practical learning activities. It is important to consider whether you will be able to attend on-campus activities before enrolling in a specific course.

In general, content will not change between delivery modes for a specific course. However, this may vary between courses, so please check the UQ course ECP for the most accurate information.

Finally, students seeking to start the MD in 2022 or later (at UQ) are required to complete two prerequisite courses, BIOM2011 and BIOM2012 (or recognised equivalents) to be eligible for entry. Thus, as aspiring premedical students, you should include these in your study plan.

About the SECaTs

Student Evaluation of Course and Teacher (SECaT) questionnaires are coordinated by the University of Queensland to evaluate student involvement and response for specific courses using a five-point scale (1 – 5 corresponding to strongly disagree/poor and strongly agree/excellent respectively). The UQPMS course guide presents these SECaT scores as part of their review. These scores are the property of UQ and are also available [online](#) on the public domain of the UQ Teaching and Educational Development Institute for any interested parties.

Disclaimer

Advice and comments offered in this course guide represent those made in good faith by the students who contributed to this publication. These do not constitute official advice from the relevant schools and faculties. Courses are subject to change from year to year, and comments and information collated here are reflective of the versions of the courses offered in past years. Always consult the electronic course profile (ECP) for further information on course activities and assessments, and/or seek advice from the relevant course coordinator.

Where insufficient reviews for specific courses have been received, the previous year's review has been used instead. However, the SECaT results will be updated unless the 2020 SECaT is unavailable (the 2019 results will be used instead). These will be indicated with an asterisk* next to the course code. The 2020 and 2019 Course Guides are also available at on our website (uqpms.com). Please keep in mind that while many courses remain similar each year, each course is subject to change between years.

The UQPMS executive team is always happy to receive feedback on this publication.

Acknowledgements

UQPMS would like to acknowledge and thank the following students for their contributions to this publication:

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BIOL1020

GAMSAT RECOMMENDED

Genes, Cells & Evolution

Students taking this course will learn about the fundamentals of molecular cell biology and genetics by examining what cells are made of and how the genetic information to build cells and perform cellular processes is encoded, executed, and inherited. The course explores the connections between physical processes at the molecular level and the whole organism phenotype, and identifies how cellular, genetic, and evolutionary processes affect everyday life.

[Original UQ Description](#)

ADVANTAGES

- Good introductory course to university biology.
- A lot of overlap with high school biology makes the transition to university easier.

DISADVANTAGES

- The amount of content can be overwhelming at first.

TIPS AND TRICKS

- Don't do the pre-readings if you're short on time or motivation; do lecture slides and EdX first, then go over the related concepts.
- If lecturers have emphasised a concept this means you should go into more detail in your response to a question.
- Start deep thought questions early and discuss with friends.

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

Flexible

External

Prerequisites

Nil

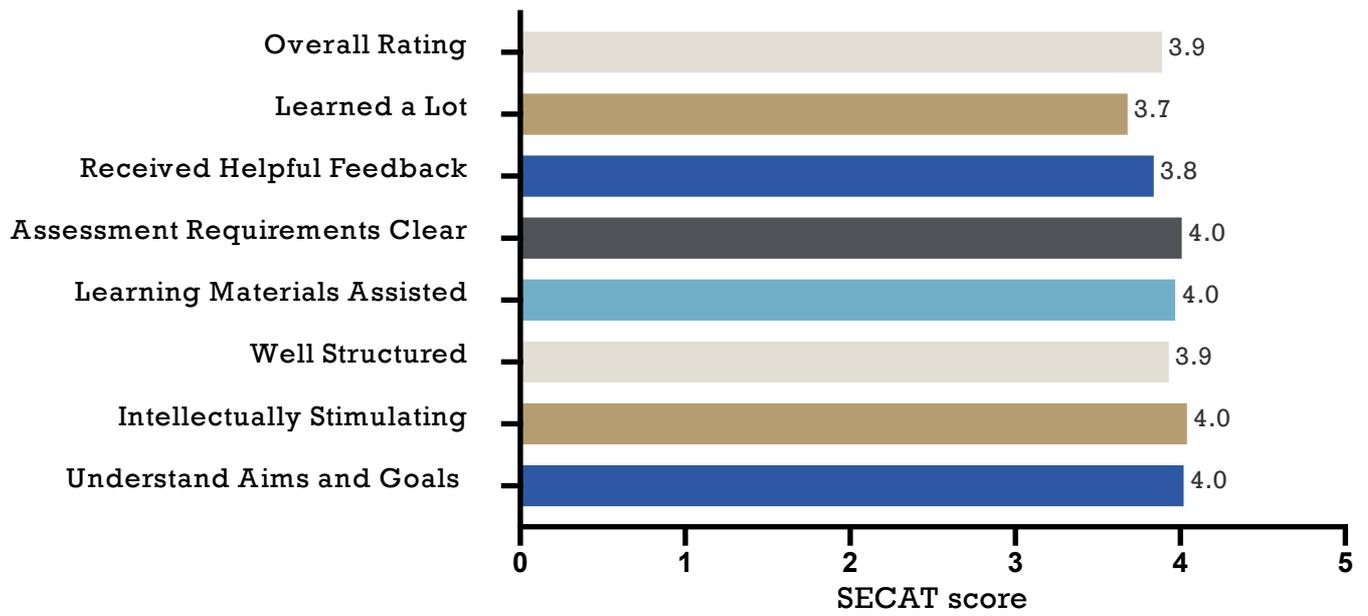
Class Contact Hrs

1 Lecture

1 Tutorial

3 Practical

SECAT RESULTS



BIOL1030*

Global Challenges in Biology

This course details the living world of which we are a part, from microbe to ecosystem. It provides clear cases of how human health, quality of life and future is intricately linked to the well-being of other organisms and the environment we all share. The course will lead students through a number of global challenges which highlight global biodiversity as a source of biomedical and economical innovation. This lays the foundation for understanding and facing the environmental and biomedical challenges facing humans and the planet.

[Original UQ Description](#)

ADVANTAGES

- This course is interesting and well-designed. It involved many unique learning activities and assessment items, including a field trip to collect evidence for assessment.
- It does not require high school biology.
- Great for those interested in general biology, not just the cellular, clinical detail.
- There is a genetic component which complements BIOL1020 content.
- Lecture slides are consistently posted early on Blackboard.
- Relatively low reading load. It is possible to do well just on lecture content and understanding the examples given. The course isn't heavy on textbook reading.
- It's a great chance to meet biology students who are not biomedicine majors.
- There are recognised volunteering opportunities during the term – data collection in creek catchments.
- Lecturers are clear on what is expected to be learnt and assessed.

DISADVANTAGES

- The exams are not too difficult to do well in, but you will need some exam technique as most of the marks are given in the SAQ section.
- The course is not directly relevant to the biomedical field.
- The field trip assessment was largely luck – besides plant identification, there was a scavenger hunt to identify

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

Nil

Class Contact Hrs

3 Lecture

3 Practical

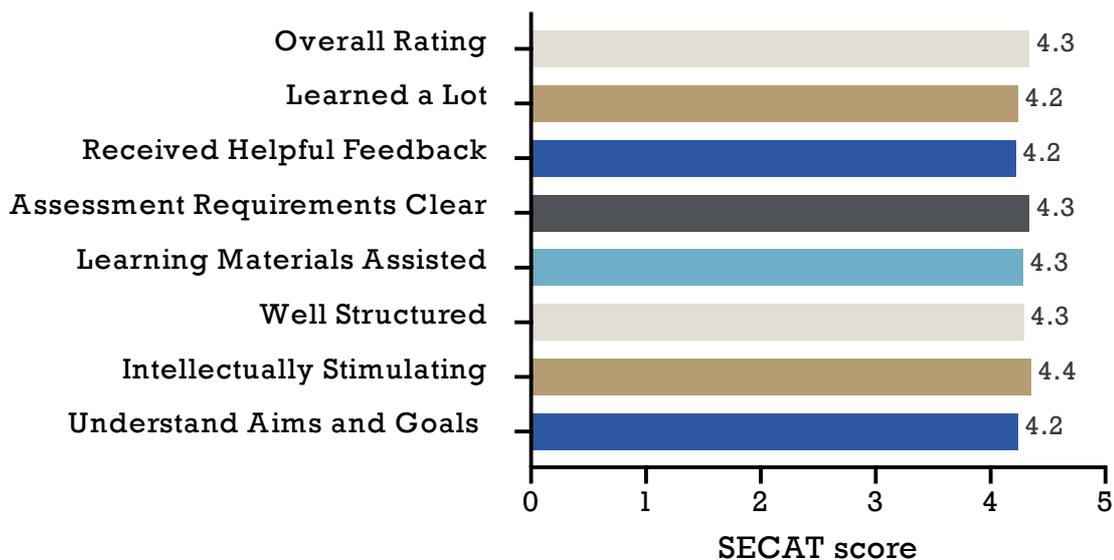
certain organisms, which may be difficult depending on the weather.

- Some of the terminology (e.g. “ecological services” vs “ecological functions”) can be confusing and cannot be resolved by a simple Google search.

TIPS AND TRICKS

- Content that is covered in both practicals and lectures in broad topics (e.g. plants) will have a high probability of being examined. Focus on those topics.
- The textbook covers unnecessary details that aren’t examined. Don’t feel the need to read ahead – for the most part, it’s mostly something for further reading when encountering a difficult concept. This advice is also given by the lecturers.
- Make sure you understand why the example or statistic was in the slide.
- Explain your exam answers clearly and succinctly – otherwise, you will lose points.
- Sometimes it helps to do extra readings in the Nature publications (detailed at the bottom of the lecture slides) if you want to clear up a topic.
- Always read the criteria for the prac reports – formatting is important, so turn your report into a PDF or risk Turnitin messing it up.

SECAT RESULTS



BIOL1040

GAMSAT RECOMMENDED

MD RECOMMENDED

Cells to Organisms

The course covers the fundamental concepts that allow complex organisms to function, with some focus on the human body & other higher organisms. Key concepts include basic cellular transport & signalling mechanisms, neuronal structure & function, motor mechanisms & locomotion, circulation & gas exchange, & the endocrine system. Of key importance is the integration of different concepts as they apply to the structure and function of different regions of the entire organism.

[Original UQ Description](#)

ADVANTAGES

- The course is well structured and very interesting.
- It is a great groundwork course for biology students.
- The cardiovascular module is one of the easiest modules (though quite content heavy).
- There are a lot of assignments which reduces the weighting of the final exam.
- The lecturers are very nice and happy to help.

DISADVANTAGES

- Module quizzes are quite tedious and oftentimes slow.
- Personal response task is really vague with not much guidance as to what is required of you.
- The group eConference assignment is quite tedious and the papers were difficult to understand.
- The Mastering Biology Quiz does not work well. The page takes a long time to load in and it wasn't because of slow internet.
- The Mastering Biology quizzes were either really hard or very easy.
- The few in-person practicals weren't very helpful.
- The communication assignment seemed a bit useless.
- MCQ had a lot of marks assigned (2 marks/Q!)

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

Nil

Class Contact Hrs

3 Lecture

1 Workshop

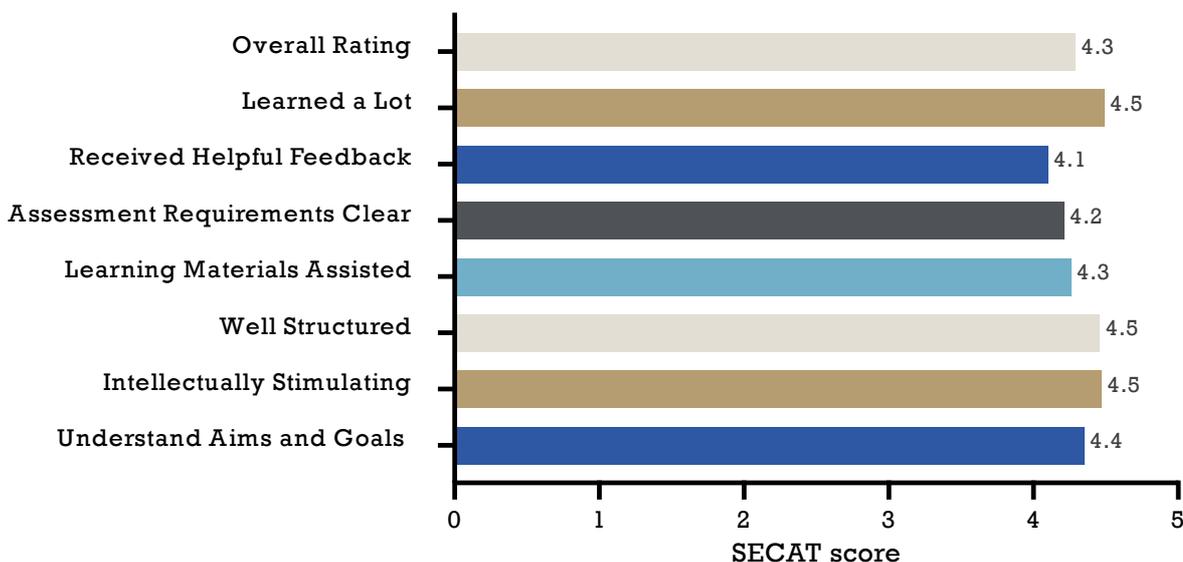
1 Tutorial

- Lots of small assignments worth 3–10% due throughout the semester, so you never really get a break because there's always something due.
- The exams rely mainly on memorisation (with very little application/problem solving), so this course requires time/effort to learn the content.

TIPS AND TRICKS

- Get started ASAP on the eConference task (group assignment). The validation process can be quite tedious and annoying.
- You get to choose your research paper/topic for the Professional Response. It is ideal to choose something you are interested in that can link to course content and isn't too technical.
- Find good teammates for group work!
- Attend the PASS sessions and the workshops, even though they are optional!
- For the final, do as many practice exams as possible. Often, the questions are recycled or reworded.
- There is quite a lot of content and it is pretty fast-paced, so take notes consistently.
- Completing past exams is an effective way to study for this course.
- The final exam tests the entire semester, so keep revising previous modules!
- There are lots of assessments due constantly, so make sure you have a good planner/organiser or have regular reminders set up for the due dates.
- Study with friends and ask each other lots of questions.
- Take quizzes/pracs seriously even though they're only worth 3–5% each (they add up!)
- Do the Mastering Biology quizzes for each module or topic because it will be fairly similar to the graded quizzes.

SECAT RESULTS



CHEM1100*

GAMSAT RECOMMENDED

Chemistry 1

This course provides the foundation in concepts underpinning inorganic, physical and organic chemistry necessary for advancement to the higher levels of study in chemistry and engineering courses. Core topics include: atomic structure, bonding and hybridisation, molecular shape, an introduction to organic chemistry, states of matter and intermolecular forces, chemical equilibrium, aqueous solution equilibria, thermodynamics, and redox chemistry. This course is a prerequisite to CHEM1200 Chemistry 2 for all students in the following programs: BSc, B Biomedical Science, B Biotechnology, B Engineering and B Occupational Health & Safety Science.

[Original UQ Description](#)

ADVANTAGES

- CHEM1100 is a required course in the biomedical science major, and is one of the largest first-year courses. As a result, it's a great chance to meet a lot of people, as all those interested in pursuing medicine will have to take it unless they have it credited.
- This course covers many aspects of chemistry, building on many of the concepts done in high school chemistry. This makes the course a lot more accessible to those who did chemistry in high school and will provide an easier transition into university studies.
- Only the best 10 results from the weekly Sapling quizzes are counted towards your final grade, giving you some room for error.

DISADVANTAGES

- Even if you have completed high school chemistry, you should pay careful attention. The course aims to build on the concepts covered in high school, and so new and unfamiliar content is expected. It's easy for you to get lax and a bit complacent as some of the content seems familiar, and end up missing new material.
- The weekly Sapling quizzes can be a little fussy sometimes. It relies on you answering the questions exactly as they want.

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

Senior Chemistry

OR

CHEM1090

Class Contact Hrs

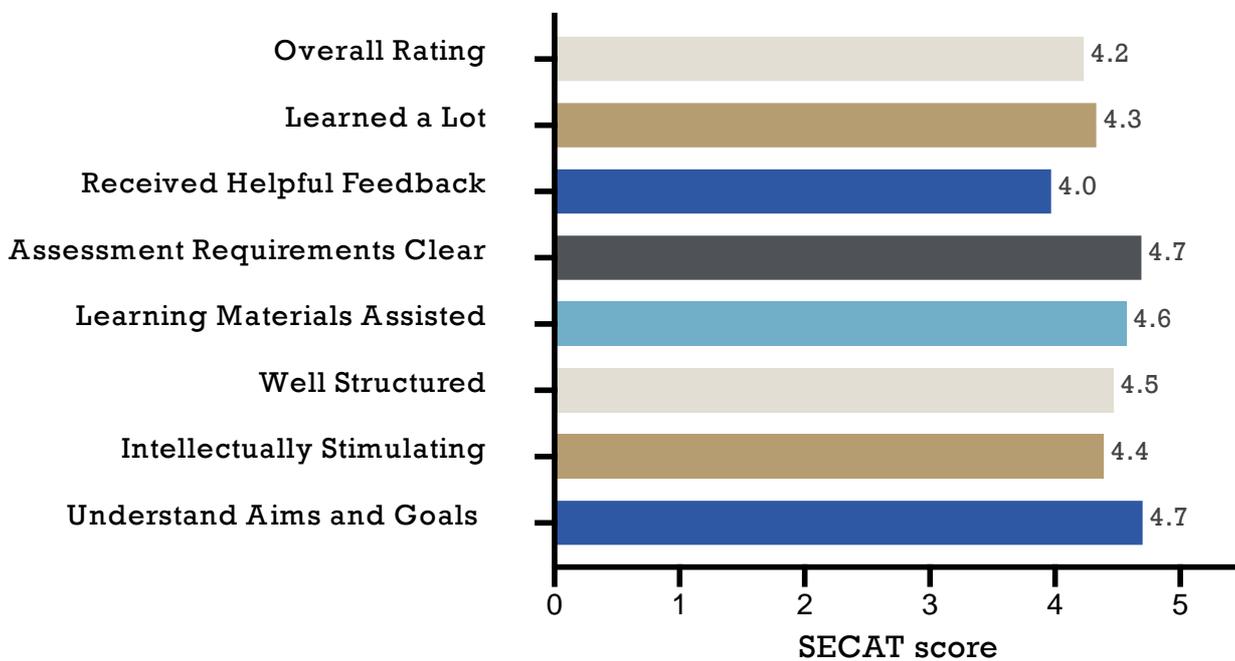
3 Lecture

3 Practical

TIPS AND TRICKS

- Stay on top of the weekly online quizzes. There is a 40% (including lab marks) hurdle, so make sure to complete them before the deadline!
- The lectures are quite in depth already, so many find the textbook to not be as crucial unless you really want to study further and understand particular details. Most students would recommend getting an electronic copy, which is cheaper.
- Be careful with the post-lab quizzes. They contribute to a fair chunk of the practical mark, so be cautious with things like rounding and reading the question carefully.
- Always read the lab manual before the practical and have a look at the questions so you can ask your tutor in the session. This goes without saying, but always do your prework – it will make your life easier.

SECAT RESULTS



CHEM1200

GAMSAT RECOMMENDED

Chemistry 2

This course builds on concepts that have been introduced in CHEM1100 (Chemistry 1) thereby developing the knowledge and understanding across inorganic, physical and organic chemistry necessary for advancement to the higher levels of study in chemistry, biochemistry and engineering courses. Core topics include: reaction profiles and kinetics, structure, reactivity and mechanisms, organic functional group chemistry, structural determination, acid and base chemistry and transition metal chemistry. This course is recommended for all students in the following programs: BSc, B Biomedical Science, B Biotechnology, B Engineering and B Occupational Health and Safety Science.

[Original UQ Description](#)

ADVANTAGES

- Introduces many concepts around organic chemistry and electron pushing that become useful in later biochemistry courses.
- Only 1 lab report for the entire course, just Sapling, lab quizzes and exams for the rest of the assessment
- Sapling quizzes and practical marks are easy to achieve high grades for and help with maintaining a good GPA.

DISADVANTAGES

- Study-intensive course: have to make sure to keep up with the content.
- A lot of content to keep on top of for the final exam. The pre-recorded lectures can vary in length each week, where 3-4 topics are taught each week using 3-4 videos of 20-30 mins for each topic most weeks.

TIPS AND TRICKS

- Just learn all the different organic reactions and their names and you'll be sweet.

GENERAL INFORMATION

Offerings

Summer Semester

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

CHEM1100

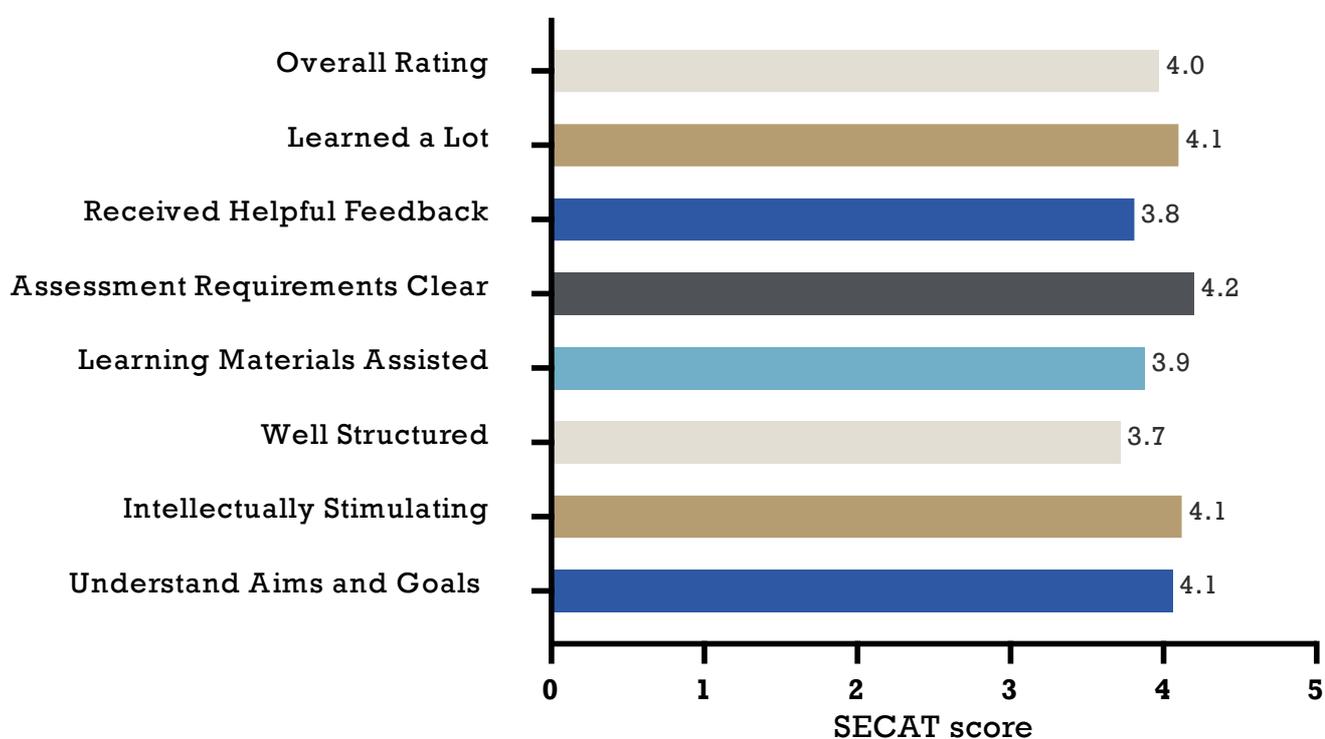
Class Contact Hrs

3 Lecture

3 Practical

- Main focus is organic chemistry, but there are also a lot of other interesting topics taught. Reading the textbook will help with understanding key concepts, and it has a list summarising the different reactions learnt.
- A lot of content in the final exam, so it's important to keep on top of the lectures each week and all of the worksheets.
- For some weeks, the pre-recorded lectorials can consist of up to 10 clips, ranging from 10–45 minutes, so it's hard to organise watching lectures around other classes at times (especially after midsem).
- The think.chat.learn does not have participation marks, and is marked based on your responses, so read the rubric.

SECAT RESULTS



ENGL1500

Contemporary Literature: Reading & Writing

This course introduces students to examples of the best contemporary writing in English, from a range of cultures. It complements the focus on classic literature in ENGL1800. Genres include the novel, the graphic novel, short fiction, and poetry and authors studied are Simon Armitage, Alison Bechdel, Ian McEwan, Amanda O'Callaghan, and Ruth Ozeki. In addition to providing a grounding in contemporary literature, this focuses on critical reading and writing skills.

[Original UQ Description](#)

ADVANTAGES

- Interesting course with content that offers a reprieve from the usual science courses. Good for well-rounded intellectual development.
- Discussions in tutorials are fun and relaxed. People actually want to be there and are keen engage with the content, unlike practicals in biomedicine.
- 25% of the course marks come from the reading quizzes which are extremely straightforward, especially if you've read the books.

DISADVANTAGES

- Compared to science subjects, they mark harshly in English literature assignments (at least if you are aiming for a comfortable 7).
- Qualitative criteria sheets (i.e. they don't tell you how much each criteria is weighted so the marks are completely arbitrary) & minimal guidance on the assignments (they do provide exemplars that got a 7 though).
- Feedback is very unhelpful without extra harassing of your tutor. (The memes on UMLL about "great essay! You got 80%" are accurate.)

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

Nil

Class Contact Hrs

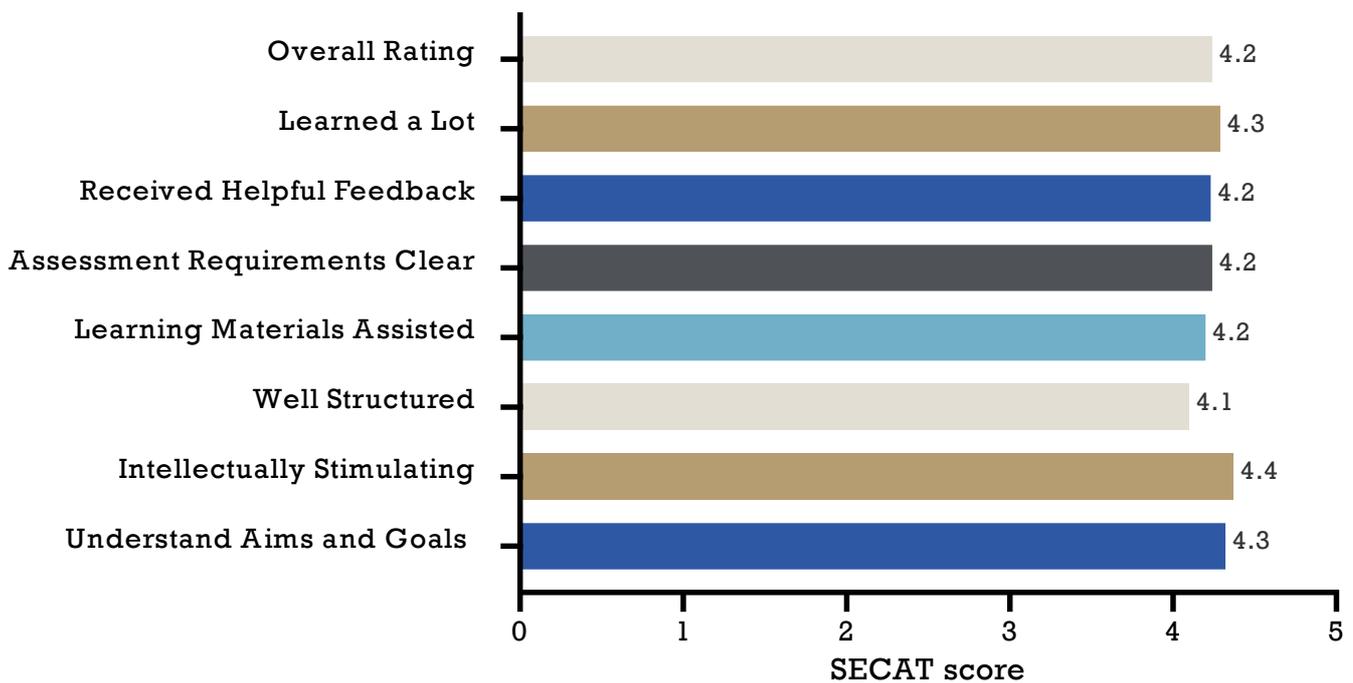
1.5 Lecture

1.5 Tutorial

TIPS AND TRICKS

- Read through exemplars carefully and try to analyse how/why they did well before applying it to your own writing.
- Take the initiative and request additional feedback from your tutor until you know exactly how to do better on your next assignment.
- Pay attention to MLA formatting. It's worth a surprising number of marks and you'll be kicking yourself for losing them because you didn't spend the extra ten minutes required to read the guidelines more carefully.

SECAT RESULTS



FINM1415

Introduction to Finance

This course provides an introduction to finance. It describes the role and function of stock markets, bond markets and foreign exchange markets. It develops an understanding of the time value of money and how organisations finance their operations, make investments and distribute profits.

[Original UQ Description](#)

ADVANTAGES

- Easy course to do well in as there are lots of practice questions from tutorials and past papers – the structure of questions begin to repeat eventually.

DISADVANTAGES

- Not much course *content* and just really formulas, so not the right course if you want to *learn* a lot of content regarding finance.

TIPS AND TRICKS

- Heavily based on calculations, so do a lot of practice.
- Bring around formula sheet with you everywhere.
- There is a group assignment with heavy weighting. Make sure you go to all the tutorials otherwise you will be lost for the assignment.
- They post tutorial answers at the end of the week. Utilise this and review the tutorial questions each week.

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Recommended prerequisites

ACCT1101

OR

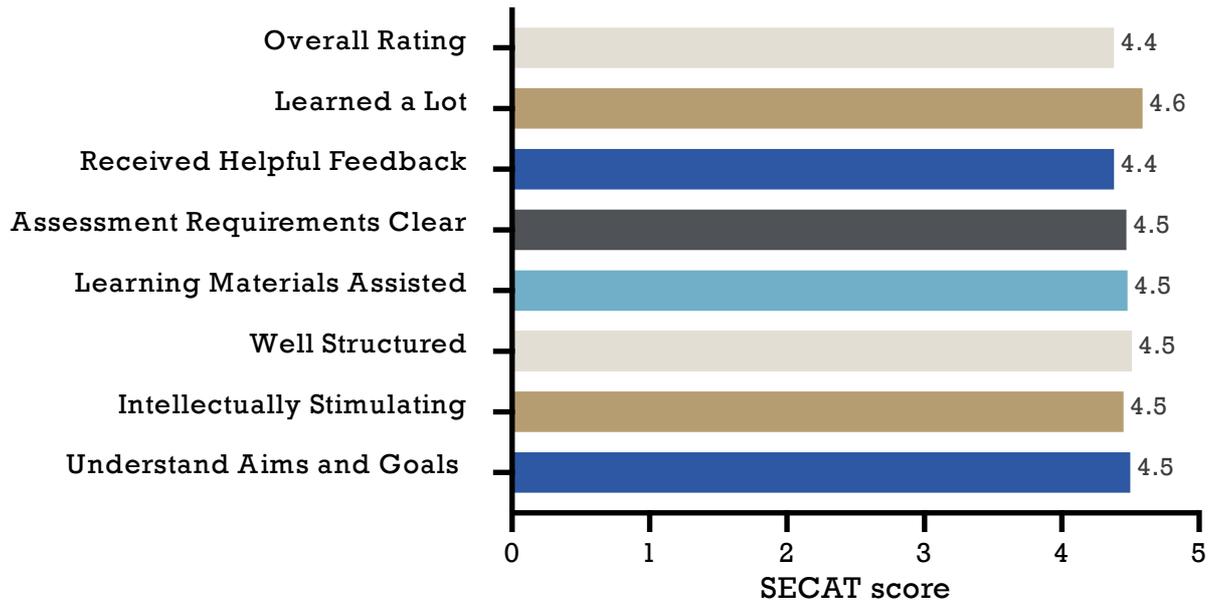
ACCT1110

Class Contact Hrs

2 Lecture

2 Tutorial

SECAT RESULTS



MATH1051

Calculus & Linear Algebra I

(MATH1051 can be studied concurrently with MATH1052)
Vectors, linear independence, scalar product. Matrices, simultaneous equations, determinants, vector product, eigenvalues, eigenvectors, applications. Equation of straight line & plane. Extreme value theorem, maxima & minima. Sequences, series, Taylor series, L'Hopital's rules. Techniques of integration, numerical methods, volumes of revolution.

[Original UQ Description](#)

ADVANTAGES

- Good introduction to university-level maths after high school maths.
- Some topics are quite easy if you've taken 3U or 4U maths (for Sydney and Melbourne interstate students).

DISADVANTAGES

- Can be surprised by topics after cruising by on familiar high school content.

TIPS AND TRICKS

- For MATLAB, watch contact hours from previous years for answers.
- Remember to do the MATLAB and it takes time but just watch the videos on blackboard and you should be fine

GENERAL INFORMATION

Offerings

Summer Semester

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

MATH1050

OR

Grade C or higher
in QLD Year 12
Specialist
Mathematics
(Units 3 & 4) or
equivalent

Class Contact Hrs

3 Lecture

1 Practical

2 Tutorial

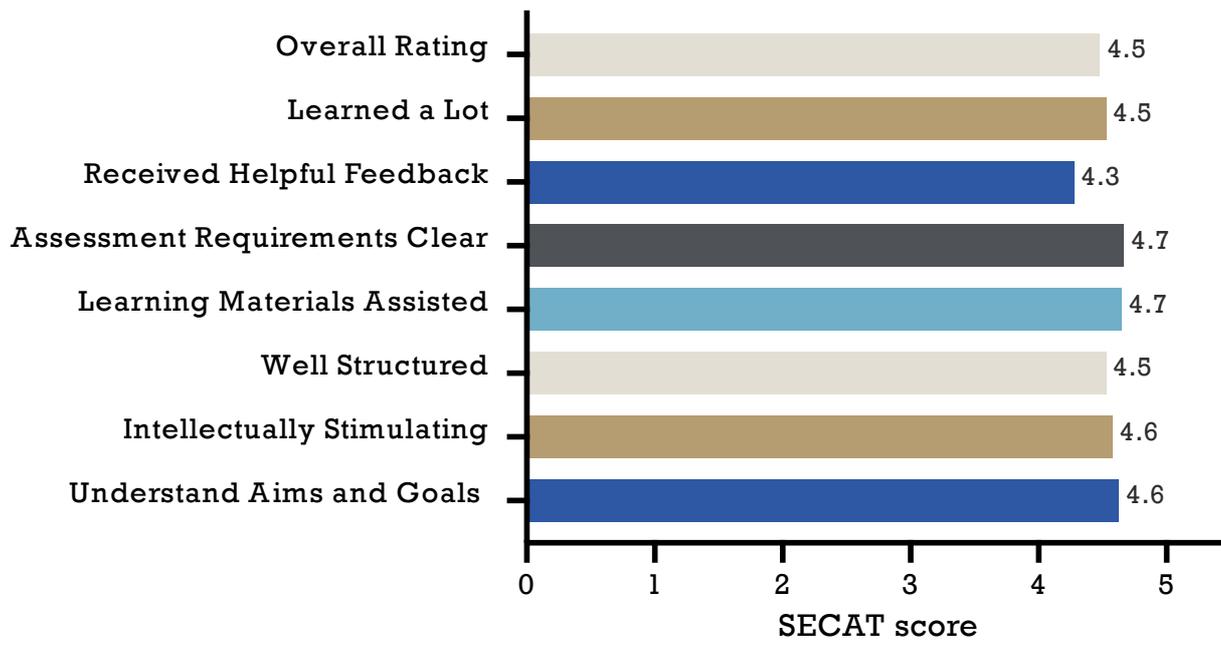
(For Summer
Semester:

6 Lecture

2 Practical

2 Tutorial)

SECAT RESULTS



MATH1061 *

Discrete Mathematics

Propositional & predicate logic, valid arguments, methods of proof. Elementary set theory. Elementary graph theory. Relations & functions. Induction & recursive definitions. Counting methods (pigeonhole, inclusion/exclusion). Introductory probability. Binary operations, groups, fields. Applications of finite fields. Elementary number theory.

[Original UQ Description](#)

ADVANTAGES

- MATH1061 does not cover calculus – instead, the subject covers other, lesser known, branches of maths such as logic, graph theory and set theory. This keeps the subject interesting, as many unique forms of maths are explored throughout the semester.
- The forms of maths which are covered in the course provide an alternate way of approaching and viewing problems. This is not only in a mathematical sense, but in a more general sense.
- The course does not have much assumed knowledge on its topics. This makes it a great course for people who are not strong in "traditional" maths, as the concepts are often far removed from the typical calculus style maths.
- Like many maths courses, there is a workbook available. The course follows the workbook closely, which eases notetaking.

DISADVANTAGES

- At times, when the lecturer is going through some of the more basic topics, it can feel that the lecture drags quite slowly for those who have had previous experience.
- The subject is mostly valuable for people doing computer science, and it is a very different learning style when compared to other courses in the biomedical degree.

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

External

Flexible

Prerequisites

Nil

Class Contact Hrs

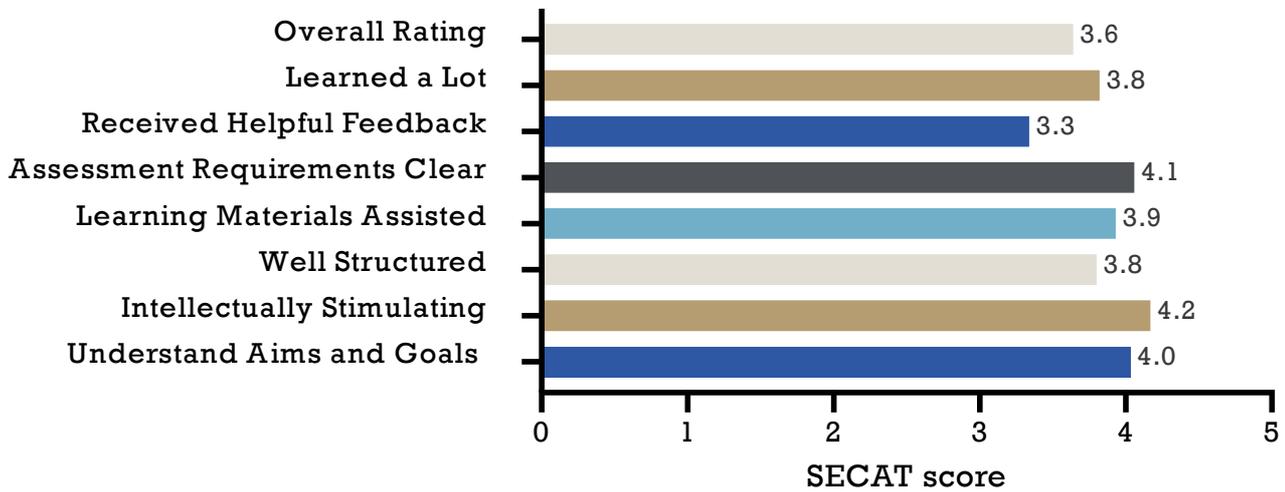
3 Lecture

1 Tutorial

TIPS AND TRICKS

- Use the workbook to your advantage. Like many maths courses, there is a workbook available, which makes note-taking easier and allows you to pay full attention in class.
- The past exams are a handy resource for exam study, especially the proof-related questions.

SECAT RESULTS



MATH1071

Advanced Calculus & Linear Algebra I

1. Elementary linear algebra: Vectors, linear independence, scalar product. Matrices, simultaneous equations, determinants, Gaussian elimination, eigenvalues, eigenvectors, applications. Equation of straight line & plane.

2. Introduction to proof-based calculus: Fields, sequences, limits, continuity, intermediate and extreme value theorems, maxima & minima.

3. Techniques of calculus: Series, differentiation, integration, numerical methods, Taylor series, L'Hopital's rule. This course differs from MATH1051 by treating material in more depth and with greater rigour.

[Original UQ Description](#)

ADVANTAGES

- Interesting to learn how the proofs work.
- Really great lecturer (Artem).

DISADVANTAGES

- A lot of content to remember.

TIPS AND TRICKS

- Very theoretical and proof-based. You need to be able to spend a lot of time memorising and understanding the proofs and it's probably not worth it if that doesn't interest you.
- Make sure you do the exercises from the lectures. Sometimes these become assignment questions and it's much easier if you've already done them. They're also good practice for the exams.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

Grade of 6 or above in MATH1050

OR

Grade of B or higher in QLD Year 12 Specialist Mathematics (Units 3 & 4) or equivalent

Class Contact Hrs

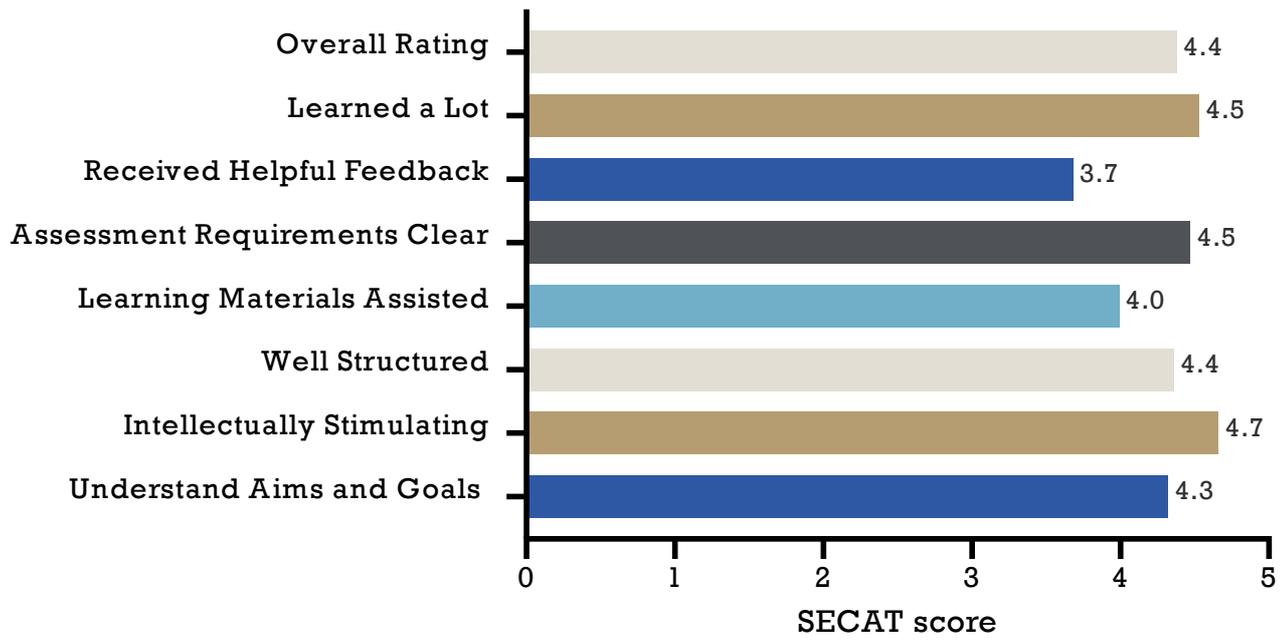
3 Lecture

1 Contact

1 Practical

1 Tutorial

SECAT RESULTS



NEURO1020

(PREVIOUSLY PSYC1020)

The Brain and Behavioural Sciences

Psychology is the scientific study of how people behave, think and feel. This course spans a variety of topics including psychological processes such as perception, attention, learning, memory, and decision-making, as well as the cognitive and brain-based (neural) causes of these phenomena. Students will be given opportunities to participate in both classic and state-of-the-art psychological research and will gain an understanding of the research process to study both the mental and neural causes of human behaviour.

Note: Students who have already completed PSYC1020 do not need to enrol in NEUR1020. If PSYC1020 was completed under a different program, apply for credit in NEUR1020.

[Original UQ Description](#)

ADVANTAGES

- Overall, a relatively easy 7.

DISADVANTAGES

- Content is sometimes dry.
- Essay marking can be harsh.
- Questions in the online quizzes can be tricky (require a bit of thinking).
- The quizzes are worth 48% of your overall mark, so you need to be up to date on a weekly basis.

TIPS AND TRICKS

- Organise your notes properly: even though all the quizzes are open book, if screenshots are your only notes, then Ctrl+F won't work and you'll waste a lot of time.
- Work on the essay consistently rather than rushing it at once – it looks deceptively easy, but it still requires quite a bit of time.
- Follow the required referencing style properly!

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

Nil

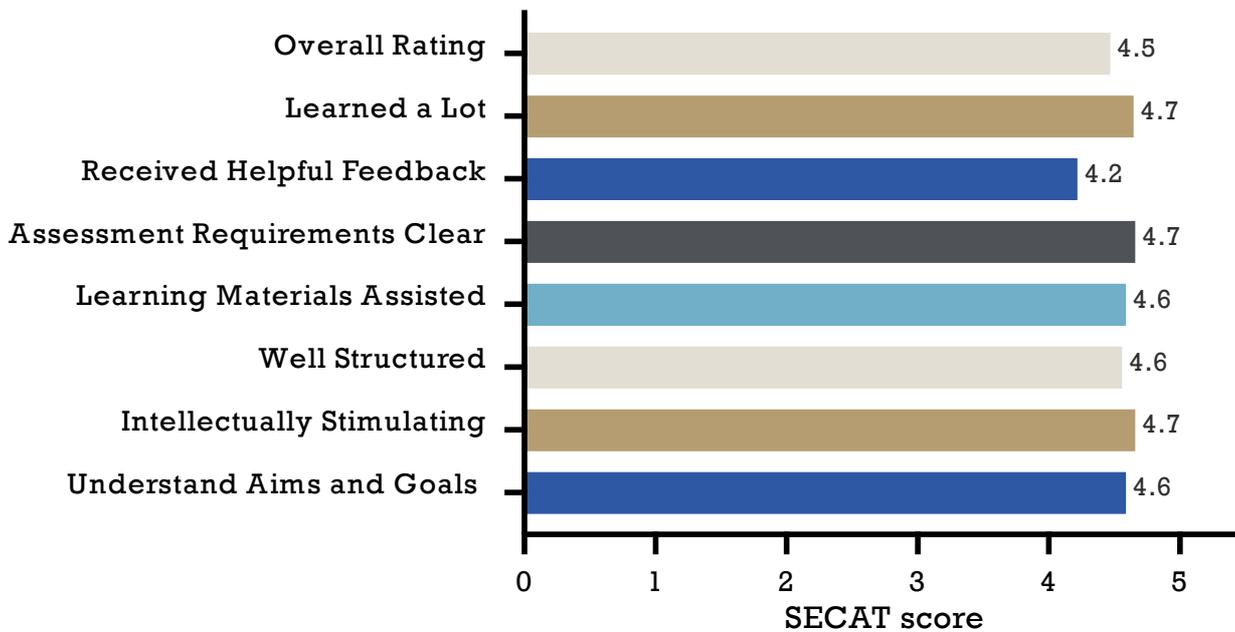
Class Contact Hrs

2 Lecture

1 Tutorial

- Do the ripple exercises at the beginning of each week so you don't have to worry about it later.
- The lectures are mainly used to cover content that has already been covered in EdX.
- Questions in the online quizzes are sometimes unclear and require a bit of thinking, so don't rush them.

SECAT RESULTS



NUTR1023

Health & Fitness Through Diet & Exercise

This course will examine the influence of diet and exercise on health, fitness and well-being. During the course students will learn about – the functions of nutrients in the body; how the body responds to exercise training; how to determine if students' own diet and exercise is meeting current recommendations; how to develop an exercise program to improve health and fitness; how to use diet and exercise to maintain a healthy body weight and how nutrition can be used to enhance exercise performance. The course is structured in a way that will allow the application of knowledge gained about diet and exercise to improve students' own health and fitness.

[Original UQ Description](#)

ADVANTAGES

- Content is not difficult.
- Weekly online quizzes are not difficult and allow you to stay on top of modules.

DISADVANTAGES

- Many pages and tabs to go through in modules.
- Workshops are kind of useless.

TIPS AND TRICKS

- Don't worry too much about every detail in modules. Instead, make general, very short notes.
- Heavy weighting on assignment (easy but definitely start early and be thorough).
- It is usually offered as a summer semester subject, so take it then instead of using a regular semester subject slot on it (if you are looking to go on exchange or underload).

GENERAL INFORMATION

Offerings

Summer Semester

Semester 1

Semester 2

Modes available

Flexible

External

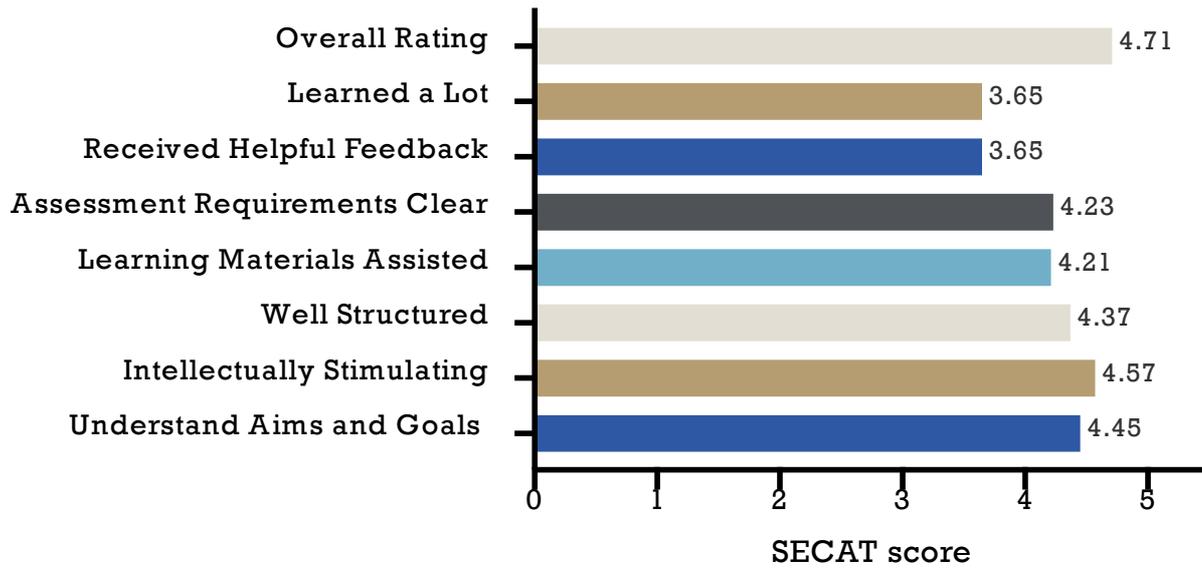
Prerequisites

Nil

Class Contact Hrs

2 Workshop

SECAT RESULTS



Physical Basis of Biological Systems

An algebra-based introduction to Physics in a biological context. Topics include forces, motion, thermodynamics, waves, fluids, electricity and biomedical sensing.

[Original UQ Description](#)

ADVANTAGES

- If you have done physics before at senior high-school level, this course is relatively easy. It provides a good overview of basic concepts.
- The tutorials are quite flexible, and the tutors are very willing to help out if you have a question.
- The course is pretty well structured, with Five Minute Physics for the course being your best friend, since it covers the basics of the concept, which (if you read it pre-lecture) puts you in a good stance for the information that comes with the lecture. There are also relevant textbook questions which are good for grounding a new concept.
- The mid-semester exam is quite relaxed, since it's all multiple choice with ample time.
- The practicals are marked in a rather interesting way – you can get 10/10 for a practical but not get all the marks for one question (e.g. 1/2) because it was cancelled out by bonus marks in another question (5/4). So, there's a fair number of opportunities to do well.

DISADVANTAGES

- Lecturers don't really explain concepts in depth, since they assume you've done the prereading on Five Minute Physics – a significant portion of lecture time is spent on practice problems and clicker questions.
- Lectures aren't compulsory, but certain clicker questions do contribute to a bonus 5%, so it would be wise to attend lectures.
- The practicals can seem bland and repetitive since you're just taking measurements and finding numbers, plugging in numbers, then dealing with more numbers.
- The practical lab questions can be slightly hit or miss – it can be difficult to deduce where the marks are allocated and where the bonus marks come from.

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

Nil

Class Contact Hrs

3 Lecture

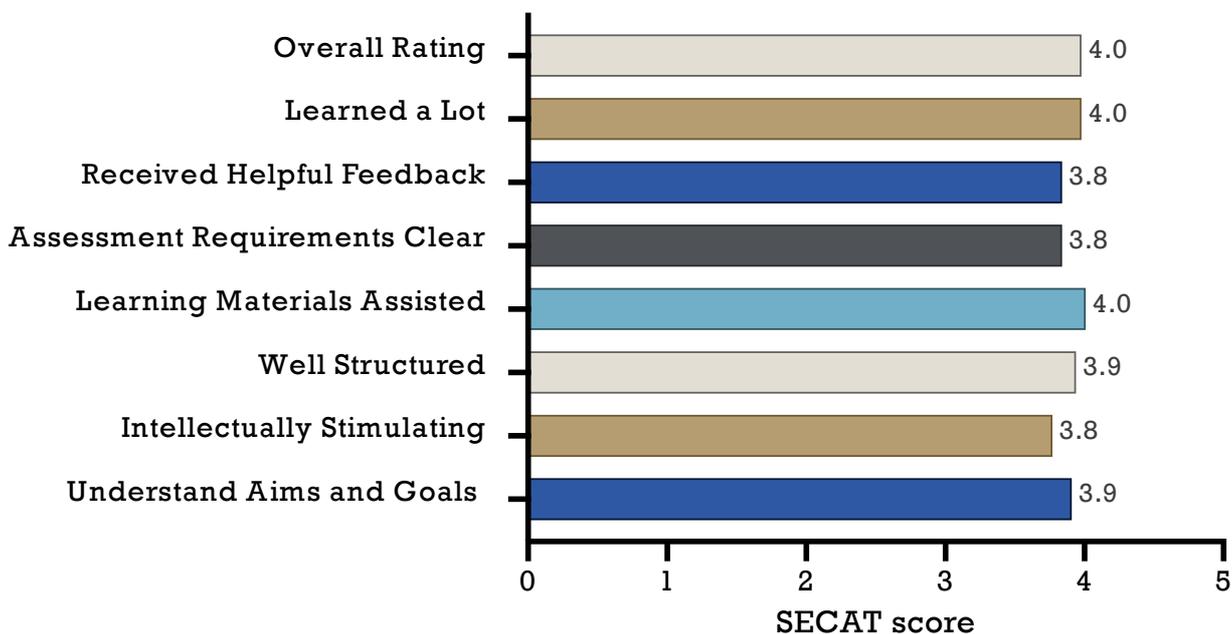
1 Tutorial

< 3 Practical

TIPS AND TRICKS

- Ask your tutor to explain any concepts you don't understand and don't leave it until the last week before exams.
- Be warned that Five Minute Physics is not the one and only holy grail of PHYS1171 – the lectures will not cover as much theory, and instead focuses on the typical questions you should expect in exams and in the course, so it would be wise to attend (not to mention you do need the clicker marks).
- Practice. You could attend every single lecture and listen attentively to how they address the question, but it isn't until you do the questions yourself that you actually learn how to apply the theory behind physics (so do all your tutorial questions, as well as the recommended textbook questions, not just the compulsory ones).

SECAT RESULTS



PSYC1030

Introduction to Psychology:
Developmental, Social & Clinical Psychology

The School of Psychology recommends only two of the three first year courses is undertaken in the first semester of study. Psychology is the scientific study of how people behave, think and feel. This course spans a variety of topics including the development of thought, language and personality as well as issues in clinical psychology. The course also covers social issues including communication, aggression, and altruism, Students will be given the opportunity to participate in both classic and state-of-the-art psychological research and to demonstrate their understanding of the research process.

[Original UQ Description](#)

ADVANTAGES

- Good course structure and interesting content.
- No final exam.
- There aren't too many assessments, and each is fairly straightforward.
- The weekly summative MCQs are relatively easy to do well in, and end up counting for a large portion of the overall marks.

DISADVANTAGES

- About 4 hours of online content to grind through each week, which could put off some people.
- Having quizzes every week mean you really need to stay on top of the content and cannot cram.

TIPS AND TRICKS

- The School of Psychology recommends only two of the three first year psychology courses are undertaken in the first semester of study.
- You need 89.5% for a 7, instead of the usual 85%

GENERAL INFORMATION

Offerings

Summer Semester

Semester 1

Modes available

External

Prerequisites

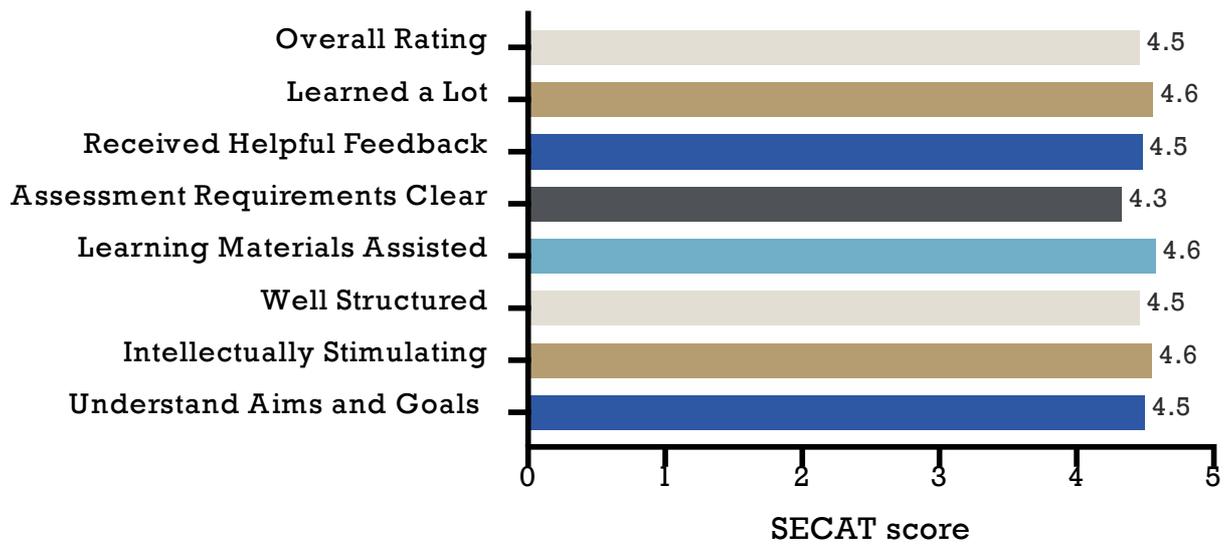
Nil

Class Contact Hrs

2 Tutorial

1 Contact

SECAT RESULTS



SCIE1000

Theory & Practice in Science

This foundation course in science introduces students to the broad range of mathematical, analytical, conceptual and computational tools employed by scientists to develop, analyse and interpret models of scientific processes. To emphasize the importance and generality of these tools, a number of key contemporary topics in science will be studied, including climate change, population dynamics, drugs and pharmacokinetics, and epidemics.

The course will demonstrate how and why mathematical models underpin modern science, and students will learn how to develop and analyse such models. The course also introduces computer programming (using the language Python) as a vital tool in modern scientific modelling. Students will be introduced to some fundamental philosophical issues in science, gaining an appreciation of some of the assumptions that underlie science and the supposed scientific method, reinforcing the importance of critical thinking, creativity and quantitative scientific skills.

[Original UQ Description](#)

ADVANTAGES

- The lecturers write in the workbook during lectures and post the notes online. A printed copy of the workbook is also available for purchase.
- Both midsem and final exams allow you to bring in a 'cheat sheet' (double-side A4 page) with anything you want on it.
- The course is quite easy if you have a good understanding of maths and functions. If you did well in Year 12 Mathematical Methods, you can cruise through it.
- Only a few assessment pieces, and there are 'free marks' from attendance and participation.
- Midsemester exam weighting can be reduced if your final exam mark is higher.
- Tutors and lecturers are insanely responsive on Piazza.
- The python content is very accessible and is a great introduction to basic coding.

GENERAL INFORMATION

Offerings

Summer Semester

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

Nil

Class Contact Hrs

3 Lecture

2 Workshop

< 1 Contact

(For Summer Semester:

6 Lecture

4 Workshop

< 2 Contact)

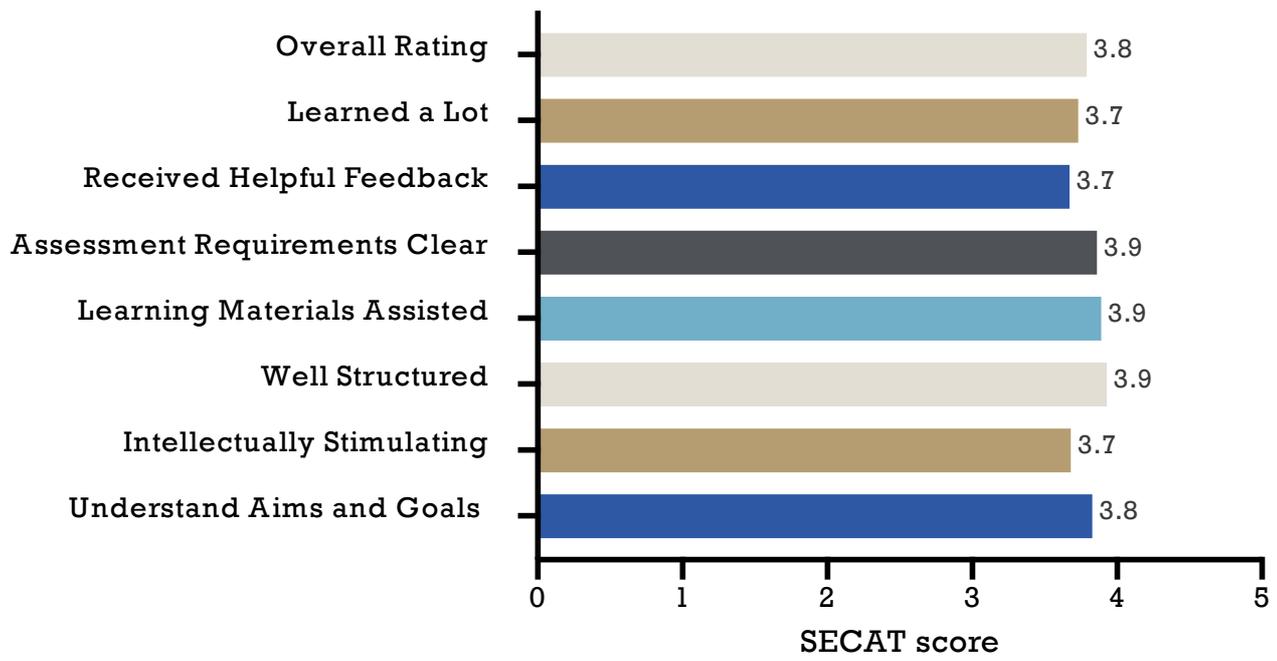
DISADVANTAGES

- There was more workshop work for external students because tutors would look through the entire worksheet, compared to internal/flexible where a tutor just checks one of your questions. However, the requirements needed to get full marks for a workshop were made very clear.
- Although the philosophy module is a nice break from coding, it is very hit or miss.
- In the exam, it is easy to lose marks on technicalities and forgotten details, even if you know the answer.

TIPS AND TRICKS

- If you find it hard to keep up with python learning in contact hours, use mypytutor.
- Do the past papers. Look at the answers posted by the lecturers, paying particular attention to what is required for worded responses/explanations.
- Learn dimensional analysis if you didn't already cover it in high school. There are many questions based around units and being comfortable with dimensional analysis will make your life infinitely easier. It is not as complex as it sounds.
- Don't forget the units when writing answers (it's easy to forget them on things like the slope of a line on a graph).
- Make sure you get on top of all the coding (e.g. by completing and understanding all the workshop exercises) or the python assignment will be difficult.
- Start python assignment early or you will be panicking with the other people in the cohort (stressful to watch 😬).
- Check on Piazza for issues you're having, especially with the Python assignment. There are many helpful hints.
- Do not overcomplicate the philosophy assignment by trying to smart with original opinions and doing a lot of your own research. Focus on the lecture content and be aware that deviating from the 'story' in the lectures is much more likely to be punished than rewarded, no matter how well-researched it is. Generally, it is better to agree with what Karl Popper says.
- If you find the content easy, the most efficient way to do the course is to work through the workshop and past exam questions by yourself, only referring back to the lecture notes when there is unfamiliar content.
- Despite the more stringent requirements for online workshop submission, they can be a better option if you are aiming for a 7 anyway, as you waste less time on tedious groupwork questions.

SECAT RESULTS



MUSC1150*

Introduction to Guitar

The guitar is a portable and versatile instrument that can be used in a wide variety of musical genres and for a diverse repertoire, from classical to folk to contemporary popular music. This course provides an opportunity for practical study of this guitar, enabling the development of basic skills, knowledge and competencies to prepare you for future use of the instrument in diverse performance settings. Please note that this course offering may be cancelled if fewer than 10 students enrol.

[Original UQ Description](#)

ADVANTAGES

- An extremely relaxed course exploring various genres of guitar and their associated techniques.
- There are only two dominant pieces of assessment: firstly, recording a compilation of performances – some items taught in class, some of your own choosing (approximately 30 seconds in length) and secondly, a final, in-class quiz based on a 25 song playlist introduced at the beginning of the semester.
- Lecturer/guitar teacher is the coolest guy and runs a relatively informal, relaxed tutorial.

DISADVANTAGES

- None, unless you consider carrying a guitar to uni twice a week for a GUITAR course a disadvantage.

TIPS AND TRICKS

- Start listening to the Spotify list early. Classical pieces will be harder to identify than the contemporary ones so make sure to listen to the entire track.
- Attendance is a PASS/FAIL hurdle. You must attend more than 80% of the tutorials.

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

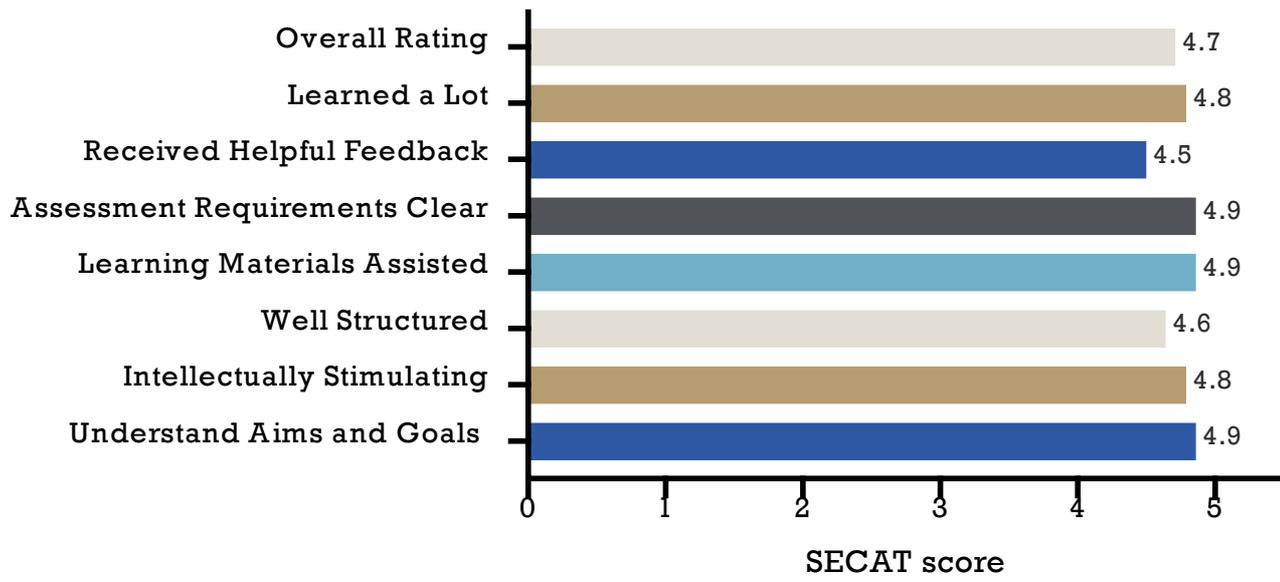
Prerequisites

Nil

Class Contact Hrs

2 Tutorial

SECAT RESULTS



PUBH1102*

Introduction to Public Health

This course introduces the history, principles, central concepts and theories of public health. Students will gain an understanding of how health is measured, and the major determinants and risk factors associated with poor health. This provides a knowledge base for understanding the complex 'wicked' health challenges of the 21st Century.

[Original UQ Description](#)

ADVANTAGES

- This course offers an opportunity to learn about researching and using health-related literature. This is a skill not often taught in other courses but are assumed for higher-level courses.
- Learning about public health allows premedical students to place our studies in a greater context, far beyond the cellular and molecular biology in other .
- The fieldwork assignment quite interesting – it really allows you to place the lecture content into your own surroundings.
- There are short guest lectures given at the start of each lecture by a Student Services staff member. This is an opportunity to learn about the support systems available for you at university.

DISADVANTAGES

- The assignments take a long time to do
- There are elements of groupwork within the assignments – how well you do can depend on who you pick as your group members. In the first semester of study at university, it can be hard to know who you might work well with.
- There is no final exam – if you don't perform well in the assignments, there is no supplementary exam.
- Some of the lecture content can be very conceptual and dry at times. It can be easy to fall behind, especially as there are no exams to study for.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

Nil

Class Contact Hrs

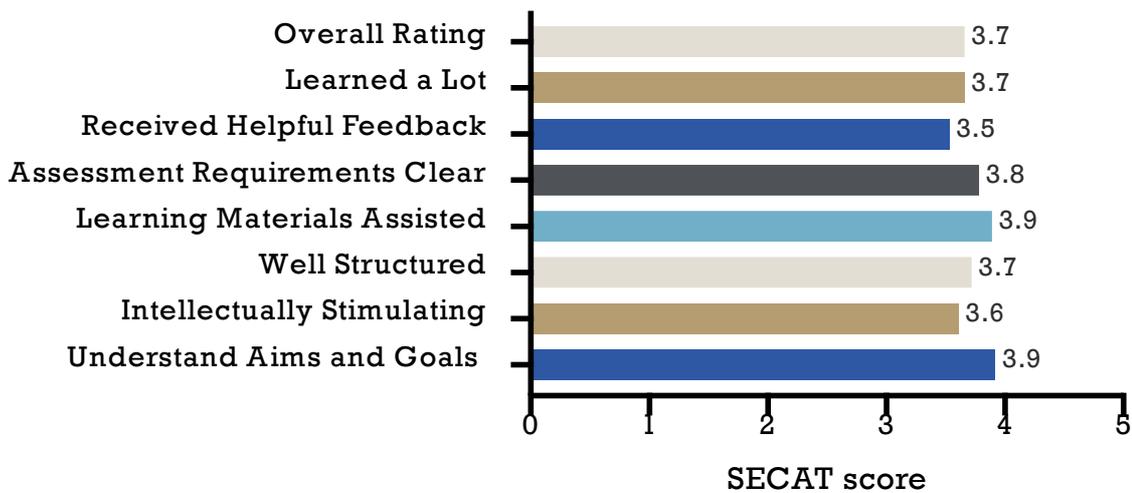
2 Lecture

1 Tutorial

TIPS AND TRICKS

- Make sure you start the assignment early so it's good quality, since markers are fairly picky.
- It's not worth doing the readings – just skim through them.
- The grade obtained is based only off essays/group work assignments and requires a strong understanding of what the tutors want in order to achieve a high mark. Due to this, the marking of assignments can be quite subjective. Take the time to really work on the assignments.

SECAT RESULTS



STAT1201

Analysis of Scientific Data

Analysis of scientific data and experiments: Design of experiments and ethical research. Data modelling and management. Exploratory data analysis. Randomness and probability. Statistical analysis including linear regression, analysis of variance, logistic regression, categorical data analysis, and non-parametric methods.

[Original UQ Description](#)

ADVANTAGES

- Learning about statistical testing is definitely important/useful in later courses, not to mention in medicine and in life in general. The vast majority of scientific research published nowadays will utilise statistics in order to get their key results, so this is your chance to build a strong foundation.
- Final exam is more calculations based (for the mathematically inclined people).

DISADVANTAGES

- Statistics is very boring if this isn't in your field of interest; the maths can also become quite complex and tedious.
- EdX content was confusing and very heavy after a few weeks (the content in weekly quizzes and lectures are much easier).
- They barely teach you how to use R studio so you'll kind of have to self-learn, even though the final is heavily based on R.
- Lectures weren't very organised and confusing to understand.

TIPS AND TRICKS

- Find good teammates that you get along with! It makes a big difference.

GENERAL INFORMATION

Offerings

Summer Semester

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

MATH1040

OR

Grade of C or higher in QLD Year 12 Mathematical Methods (Units 3 & 4) or equivalent

Class Contact Hrs

For St Lucia and External:

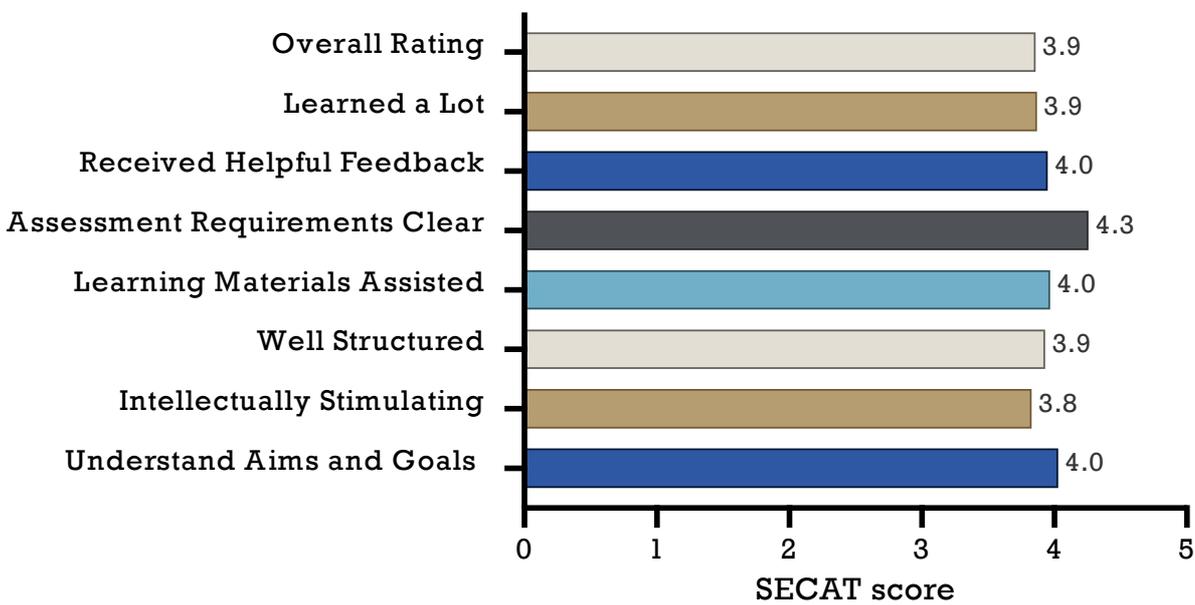
2 Lecture
1 Workshop
1 Tutorial

For Gatton:

2 Lecture
2 Tutorial

- Stay on top of your work because it's a lot of content when catching up.
- Quizzes/assignments are a lot easier than the EdX content, so don't stress.
- Finals are heavily reliant on R studio, so prioritise learning how to use R rather than understanding all the calculations.
- Attend the tutorials! Great indication of the types of questions you'll be expected to know how to answer on the finals and a good summary of where you should be up to in course content. Don't be afraid to ask the tutors for help.
- Try all the past papers – they're very similar and great practice.
- Do the EdX or else you don't know what's happening in the lecture (the lecture is just a review and watching Matt do R studio stuff).

SECAT RESULTS



BIOC2000

Biochemistry & Molecular Biology

This course will enable you to gain an understanding of the key concepts of biochemistry and molecular biology. At the end of the course you will have an understanding of how proteins can catalyse the chemical reactions that allow cells to function. To get to this point you will gain an understanding of: the nature of chemical reactions in biological systems; how genetic information is used to direct protein synthesis; how the structure of proteins is determined; how structure determines function; and how we understand the properties of enzymes. You will be able to reinforce and apply these concepts in laboratory practicals where you will purify and characterise a protein.

[Original UQ Description](#)

ADVANTAGES

- Open book exam during flexible delivery meant less memorising during exam.
- Very advantageous to know how all the ATP is being generated for future courses.
- Teaches you about hydrophobic/hydrophilicity in detail.
- Tells you how to design PCR stuff, which is very important for genetics later.

DISADVANTAGES

- It's easy at the start until enzymology begins, which is boring and overly complex. There are many complex formulas for things like competitive inhibition, catalytic activity and velocities of enzymes.

TIPS AND TRICKS

- Attend the lectures. Some lecture recordings were either faulty or missing.
- Focus on understanding not memorising. Simply looking up the question during an open book exam won't work.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOL1020
OR BIOM1050
OR BIOM105
OR CHEE1001
OR BIOE1001

AND

CHEM1100
OR CHEM1221
OR CHEM1222
OR CHEM1021
OR CHEM1022

Recommended

BIOL1040

AND

CHEM1200

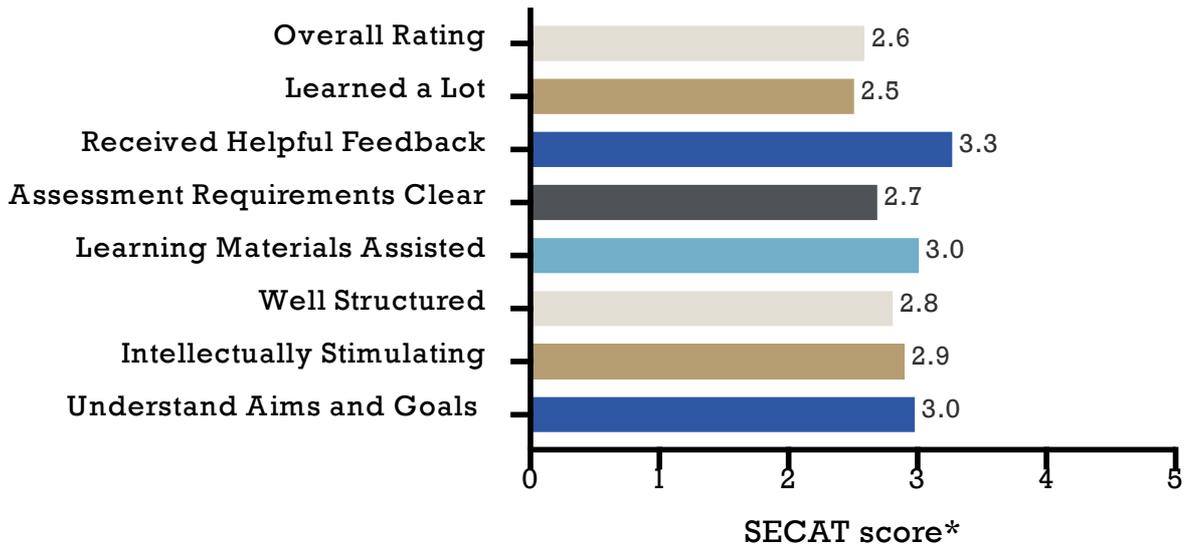
Class Contact Hrs

2 Lecture

3 Practical

1 Workshop

SECAT RESULTS



*2019 SECaT, 2020 unavailable

BIOL2200

Molecular Cell Biology I

Cell Structure and Function entails the study of the molecular mechanisms that regulate cell function. This course will provide students with an understanding of the molecules & complexes that make up cells and mediate cell activities such as proliferation, secretion, motility and cell death. Knowledge of the processes that regulate these activities is an essential requirement for the study of normal cellular physiology, and for the development of new drugs and improved treatments for many disorders such as cancer, diabetes and metabolic diseases.

[Original UQ Description](#)

ADVANTAGES

- Very useful in understanding what signal transduction actually entails.
- Very helpful in understanding laboratory techniques like GFP.
- Modules are arranged by cellular machinery (nucleus, ER, golgi, mitochondria) which is very helpful for GAMSAT and general biology knowledge.
- The final exam is relatively straight-forward compared to other subjects like BIOM2011.

DISADVANTAGES

- A lot of jargon to be memorised (e.g.K48-linked, Ikb-complex).
- Too much focus on cellular activity that is very specific, which means that it can be boring at times.

TIPS AND TRICKS

- There is a large focus on laboratory techniques. Make sure you understand them.
- Focus on memorising the pathways, not the terms.
- Include as many details as you can in exam answers.
- Make a list of past exam questions and make sure to know answers – some questions may be similar.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

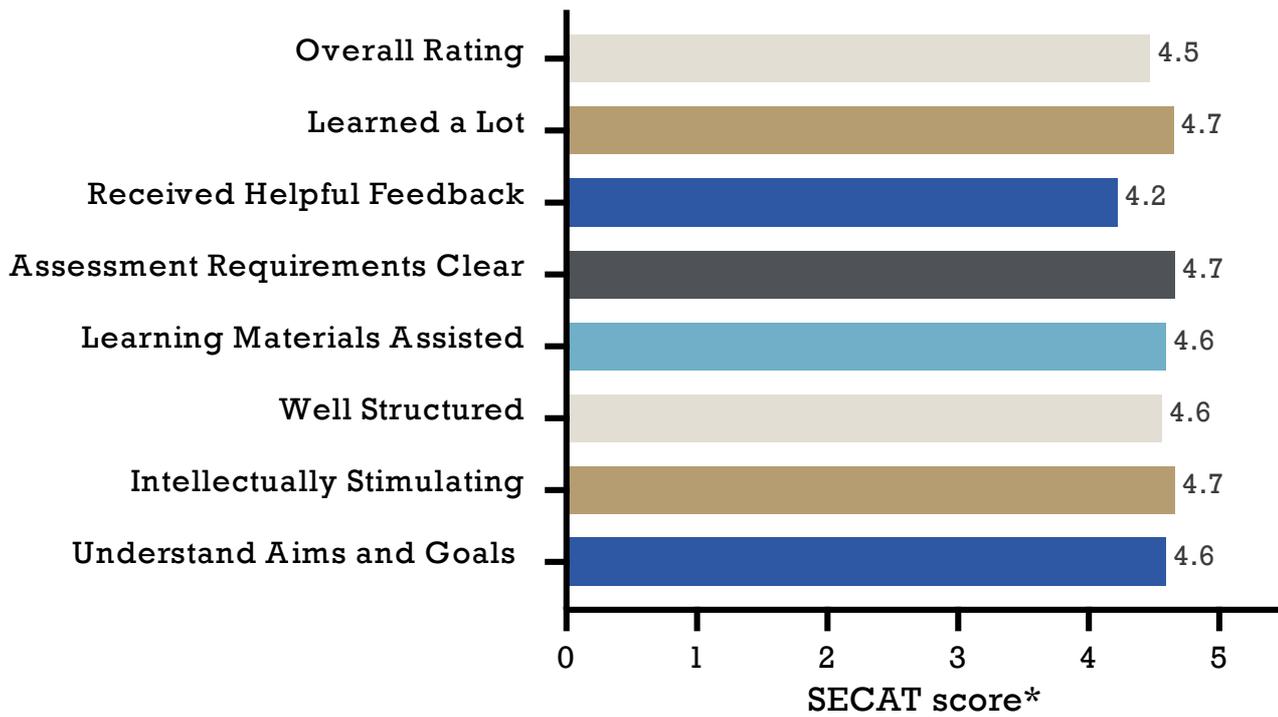
BIOL1020

Class Contact Hrs

3 Lecture

3 Contact

SECAT RESULTS



*2019 only, 2020 unavailable

BIOL2202

Genetics

The discipline of Genetics has pioneered the core concepts underlying many diverse fields of biology – ranging from medicine, biochemistry and microbiology to ecology, evolution and environmental sciences. BIOL2202 Genetics is therefore a recommended second level subject for all students pursuing a biology-focused major. Employing a strong experimental component, BIOL2202 integrates classical concepts of inheritance, development and variation with modern molecular advances arising from the post-genomic era.

[Original UQ Description](#)

ADVANTAGES

- Very open and clear communication with the course coordinator which makes it very easy to ask for help.
- Lectures are interesting and engaging.
- Content is well-structured.

DISADVANTAGES

- Mid-semester exam was very difficult (2020).
- Has a video assignment, which can require an unreasonable amount of time and creativity, while not being very relevant to biology.
- Some modules are a lot harder than others and some lecturers are not as organised.
- Only 3 major assessments (mid-semester, presentations, final) which means each is heavily weighted.
- The course content can be quite dry/tedious, particularly in earlier modules.
- Practicals can be boring and irrelevant to course content, while the practical questions in the tests are very specific to the practical itself and not the course content.
- No MCQ in the exams.

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

BIOL1020

OR

CHEE1001

Class Contact Hrs

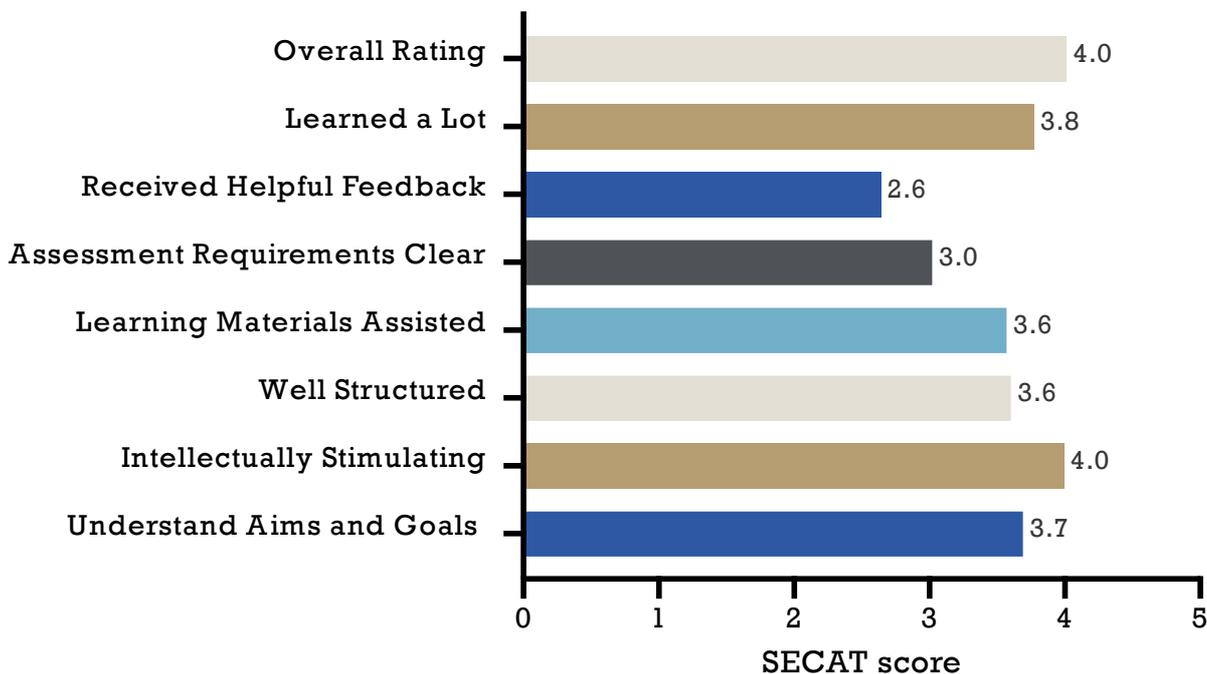
3 Lecture

3 Practical

TIPS AND TRICKS

- Do not underestimate the course (it has previously had a reputation for being one of the easiest third year courses) and take the mid-semester exams seriously.
- Start the video assignment sooner rather than later (you get 3 months); it will take longer than you think to understand your paper!
- For the video assignment, you don't necessarily need the best program – it's about your creativity, storytelling and clarity. Try starting with a lot of background research to understand your paper, then explain it to a friend (familiar with genetics).
- The content is heavy and very detailed in the first half. Try to have an index of contents so you can easily refer back to what you need.
- Take notes consistently and ask lots of questions.
- EdX content is more organised than lecture information, but use lectures to supplement it.
- Study with friends to help consolidate your understanding.
- Do the past exam questions because questions are often repeated.
- You can survive without the textbook.

SECAT RESULTS



BIOM2011

MD RECOMMENDED

Integrative Cell & Tissue Biology

Students will develop an understanding of how cells associate & interact to fulfill their normal functions in tissues & organs of the human body. This will include the basic principles of integration & regulation that underpin normal tissue biology.

[Original UQ Description](#)

ADVANTAGES

- Very good overview on hormone actions, epithelium, muscle cells, etc. These concepts are SUPER important in later courses and just general life knowledge.
- Builds on (and repeats some) BIOL1040 content.
- A lot of immunology content overlapped with MICR2000 so a bit less study needed there.
- Very extensive coverage of immunology.
- All content was on EdX: didn't need to consult any extra textbook readings.

DISADVANTAGES

- Some very boring topics (i.e. sensory modules).
- Lab reports were very big and a lot of journal readings were needed.
- Crazy amount of content if you do this course at the same time as BIOM2020 and BIOL2200.
- Most difficult SAQs in second year in terms of figuring out what they're actually looking for in a response.
- Online learning was a complete mess. Modules vary wildly in quality (there was a lack of effort seen by lecturers in certain modules). Entire topics were completely nonsensical.

TIPS AND TRICKS

- Do every online quiz. They contribute a small amount each, but they really add up.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOL1040

Class Contact Hrs

3 Lecture

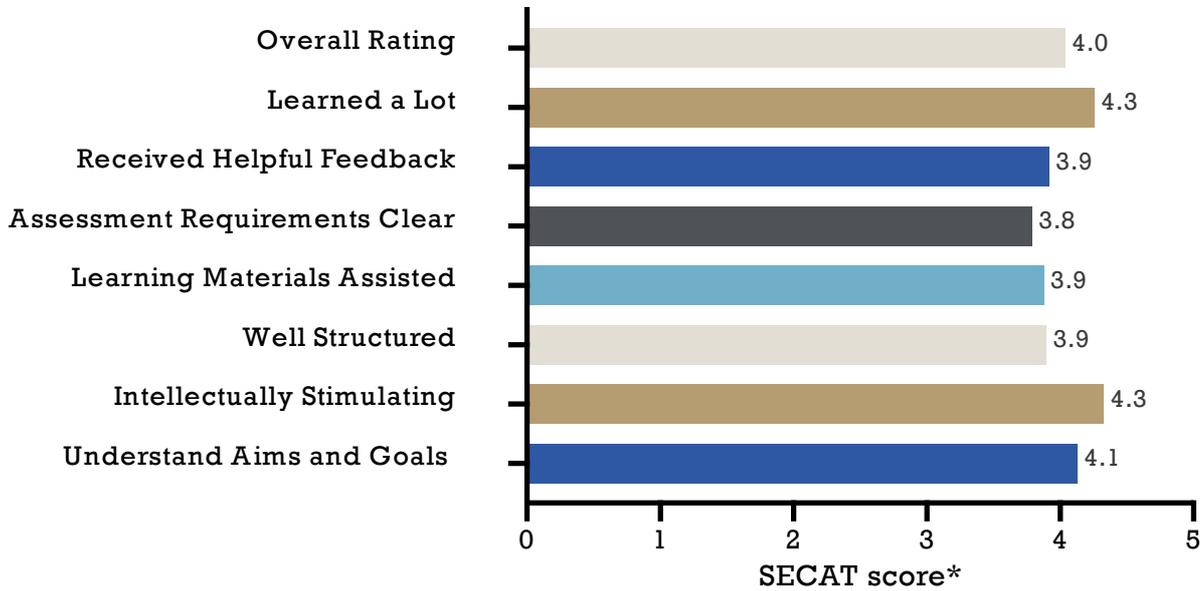
3 Contact

- Consider each module as about 3 lectures of workload. Thinking of each module as 1 lecture's worth will really demotivate you when you expect a module to take you 1.5–2 hours but it takes 3.
- Use textbooks or ask lecturers about things that don't make sense, or when there's conflicting information, but be careful of going too in-depth. It is impossible to fully understand every concept, especially given how poorly they're originally explained. Know when to just accept it and move on.
- Use the quizzes as motivation to go through and make notes/flashcards for the modules instead of just Ctrl+Fing. Better to cram in 2 week chunks than face a 12 week monolith.
- Flip through the lecture slides on the lectorials. It doesn't take too long and could be relatively high yield, especially if the EdX content is completely incomprehensible.
- The key to doing well in the practical reports is to spend an adequate amount of time reading (primary) literature and emulate their content and writing style in your own report. Pay attention to what kind of details they include in the method/figure legend (but try asking your tutor about specifics, because some of them are kinda picky, and it is very easy to lose marks for something you thought was insignificant), how they talk about other research in the discussion, the level of detail in the intro etc.
- Other tips on writing the prac reports:
 - When starting research, it can be helpful to read a review paper first, because they will provide a nice overview and a handy list of primary literature to look through. Alternatively, read some introductions from primary literature before getting deeper, because they are more digestible than discussions and will usually cite the key papers in that area of research.
 - It is better to read a few key papers in-depth instead of skimming abstracts and opening up a hundred tabs.
 - Your description of results should involve % change (or something similar) instead of just stating the values.
 - Extract as much guidance from your tutor as possible. You might be surprised at how much they'll tell you.
 - Use Vancouver referencing to save on words.
 - First person and active voice is fine.
 - Watch out for "leaps of logic" in your discussion.
 - It may seem strange at first because the actual experiments are so basic, but you are required to go into detail on cellular mechanisms in your discussion. This includes explicitly discussing results from primary literature and explaining how they support the proposed mechanisms. This might mean that you could end up using 4–6 sentences to explain just one paper. You do not need to quote specific numbers unless they're directly comparable with your own results – just focus on whether the results were higher/lower/statistically significant. Clarify

with your tutor/the prac coordinator which species (mice/rats/human/frog/toad etc.) are acceptable for primary literature in the discussion.

- o Look through the Piazza responses from the instructors.

SECAT RESULTS



*2019 SECaT, 2020 unavailable

Systems Physiology

Students will develop an understanding of how the major organ systems of the body perform their normal functions & how these are regulated & integrated in order to maintain homeostasis.

[Original UQ Description](#)

ADVANTAGES

- Cardiovascular modules are not easy, but a lot of content revisits past content so it isn't as hard the second time around.

DISADVANTAGES

- YouTube is now officially your professor. Good luck.
- Large amount of content and modules can often feel disconnected. Learning feels self-guided, since a lot of the content is delivered via EdX.
- EdX learning objectives often can't be satisfied by the limited content actually presented on the EdX (i.e. they ask for a 'discussion' of the concept but provide one line identifying this concept).
- Many complaints about lectorials not properly addressing people's questions/confusion.

TIPS AND TRICKS

- The last few modules were a lot lighter content-wise, so keeping up with the first half of the content makes life a lot easier around the second half.
- Don't bother watching the lectorials unless there is a specific concept you are confused about (in which case you should just watch that section). However, it is high-yield to take the time to quickly read through the slides, just in case there's anything you've missed. The lecturers shouldn't be including any new content (at least, any *examinable* new content), but in 2020 there was an SAQ hinging on some terminology that you'd

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

BIOM2011

Recommended

BIOC2000

Class Contact Hrs

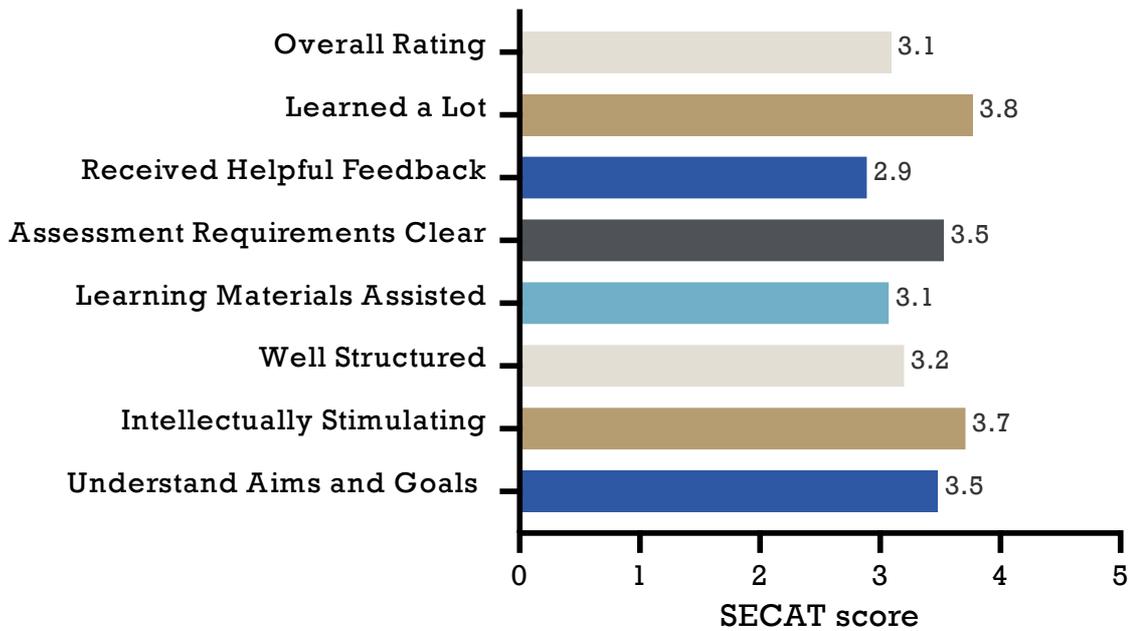
3 Lecture

3 Contact

only know if you looked at the lectorial slides (or did additional reading), which was quite an unpleasant surprise.

- Do NOT overcomplicate the experimental design for the prac assignments. You WILL suffer and you WILL get bad marks despite your suffering.
- If you go to the pracs and ask the tutors very nicely, they will provide a lot of guidance for the report.

SECAT RESULTS



Human Anatomy

This course provides an introduction to human gross anatomy and anatomical data analysis. Using prosected cadavers, students will learn macroscopic structure of human organ systems including the musculoskeletal, nervous and visceral systems. Students will collect and evaluate anatomical data gaining insights on human variation, measurement uncertainty, effect size and meaning of statistical significance. This course is pertinent to higher level studies in the biological sciences, and is a prerequisite for 3rd year dissection and research courses in human anatomy.

[Original UQ Description](#)

ADVANTAGES

- Anatomy is always important, especially as pre-med students.
- Knowing anatomy is interesting as you can identify different parts of your body, and also relate it to exercise and working out specific muscle groups.
- Course is very well-structured, despite the large amount of detail and content.
- Nice assignment where you have to use R. Good way to practice how R is used.

DISADVANTAGES

- Possibly the hardest course in second year due to the sheer amount of content and detail required. If you're spending twice the amount of time studying for this as all your other courses combined, you are not alone.
- Hard to predict what you should and don't need to memorise.
- Much harder to learn online when you can't enter the GAF and view the cadavers in-person.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOL1040

OR

BIOM1070
AND BIOM1071

Recommended

BIOL1020,
STAT1201

Class Contact Hrs

3 Lecture

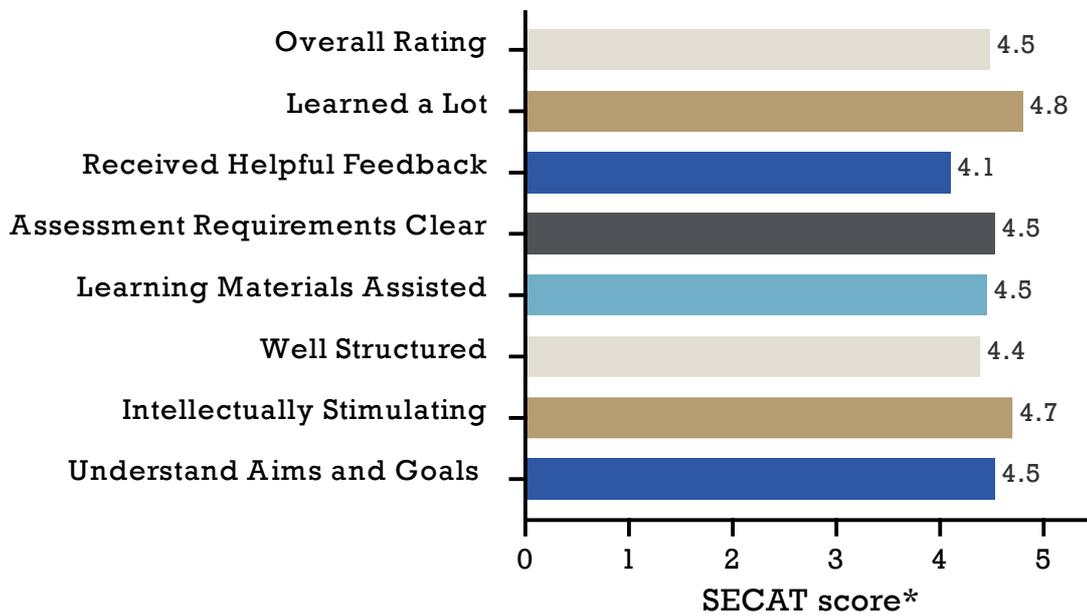
3 Practical

TIPS AND TRICKS

- You cannot cram. Do a bit of study every day at the minimum.
- The more artistically inclined may find it helpful to draw diagrams in a visual art diary to study, especially for the skeletomuscular system in the first half of the course. Visual learning is very important in this course. The less artistically inclined can get by with self-testing using diagrams in textbooks (eg. with Image Occlusion in Anki).
- Go through and make notes in your lab manual prior to the lab in order to prepare and make the most of the prac session, otherwise you'll just be lost the whole time. You're not going to be able to identify anything on a cadaver if you don't have a good idea of what it is in the first place. Importantly, the content is very modular, so you may not have a chance to look at the same thing twice. Be prepared to take the initiative to grab a tutor that's floating around to ask questions. You are not assigned one, and the student to tutor ratio isn't great.
- Drawing/labelling your own body to learn where different muscles/blood vessels can be quite useful (make sure to wash it off before an exam!)
- Use apps such as Anki (flashcards save lives) and Complete Anatomy (interactive 3D model of the human body).
- You do need to know pretty much every detail in the lecture slides and the prac books (at least if you're aiming for comfortable 7s on the exams). The functional information is important to know for SAQs on the final. A few caveats:
 - Histology was not tested at all in 2020, despite having decent coverage in lectures.
 - Think about what's too small to be realistically pinned on a spotter.
- In second year biomed, this is the course where the textbook(s) will be the most useful. Focus on the diagrams and the origin/insertion tables. The surrounding text can be helpful but is not necessary. It is worth getting Rohen's atlas to familiarise yourself with how things look on cadavers versus on pretty colour-coded diagrams (obviously your main outlet to do this is in the pracs, but sometimes Things Happen and you're not as prepared for the prac as you should've been).
- There are many discrepancies in origins/insertions of muscles depending on the source you're using. The prescribed textbook/lecture is king. (If there is discrepancy between those two, just choose the easier one to remember. It should be marked correct regardless.) Focus on the bony ones.
- View things in 3D if possible (anatomy apps, preparing adequately for pracs, doing practice spotters with photos from different perspectives).
- The lecture content and prac manual content looks like a standard Venn diagram that varies in overlap through the modules. For the musculoskeletal, it can be more efficient to go through the prac manual first because it has the most complete tables/lists of stuff you need to know. For the viscera half of the course, go through the lectures first

and then read through the prac manual and highlight what's unfamiliar (and then figure it out). Unlike musculoskeletal, most of it should be covered in the lecture.

SECAT RESULTS



*2019 SECaT, 2020 unavailable

Principles of Pharmacology

Principles of Pharmacology is designed to introduce students to fundamental concepts in drug action and drug disposition at the molecular and cellular level. Topics include the binding of drugs to receptors, receptor activation and inhibition, effect of drugs on cell signalling, drug absorption and metabolism, genetic determinants of drug action and drug toxicity. Along with basic concepts of pharmacology, students are introduced to experimental approaches to study drug effects.

[Original UQ Description](#)

ADVANTAGES

- Content is interesting as it covers different drug pathways and their real-life applications.
- Content is useful to know for med.
- Lecturers are mostly clear on what you need to know. Eg. Karin underlines the drugs you need to memorise and marks the slides with non-examinable content.

DISADVANTAGES

- Some lecturers were very dry and unengaging.
- Drug side effects/mechanisms do not make sense, are poorly explained, or are not explained at all. A lot of the time you just have to memorise it. It is mostly not worth doing the extra work by yourself to find the actual reasons for why things are like that.
- It is difficult to know how much in depth to go with the theory for the organ bath report. Also, there was a big focus on coming up with explanations for non-perfect data compared to other prac reports. However, this may have been exacerbated by everyone getting the same data sets because of COVID.
- Only had one practical during Sem 2, 2020 (due to COVID) – would have liked more practical experience.

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

BIOL2200

OR

BIOC2000

Recommended

CHEM1100,
CHEM1222,
CHEM1022,
OR CHEM1020

Class Contact Hrs

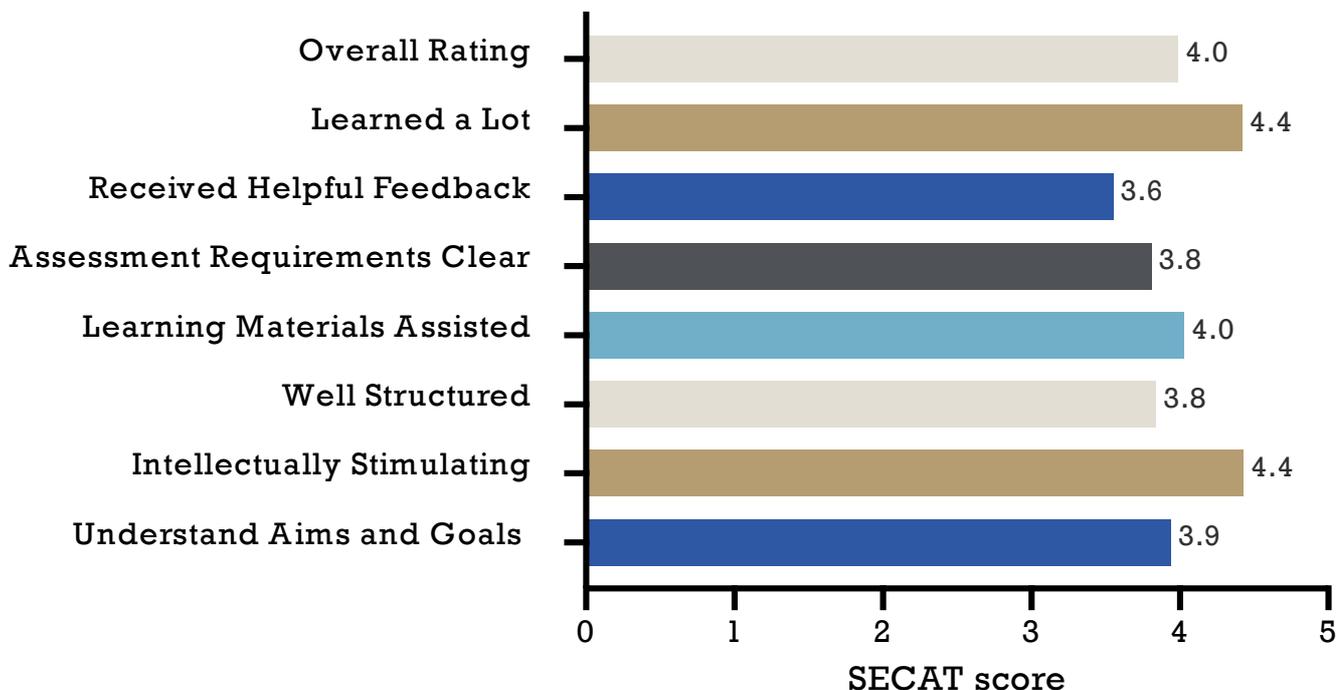
3 Lecture

3 Contact

TIPS AND TRICKS

- Flashcards (eg. Anki) are a godsend especially when staying up to date. Swapping with and reviewing each other's notes and flashcards helps too.
- Watch the lectures. If you are only reading the slides, it is easy to miss important information, especially about what's examinable and what's not.
- For drug names – practice recognition (associate name with class/function) rather than reproduction (function to name). It's easier because you can group them by modules, since the exam distinguishes questions by module. Pay attention to common stems for drug classes.
- Memorise the guidelines and details from the toxicology module even though it seems completely pointless (past SAQs test this).
- Draw out big diagrams/tables with drugs their mechanisms of action (MOA) for the bigger modules (like CNS). A lot of the MOAs are similar so it can get confusing. E.g. A cellular pathway diagram with annotations on which drug class interferes with which step.
- Be fastidious with the details in the virtual ileum report, because you'll be wanting that leeway with those free marks for the more difficult organ bath report.
- The final exam can be made a lot less daunting by having a running sheet of all the drugs you need to know with info such as their MOA, ADME, clinical use and side effects, and going over it regularly during the semester.

SECAT RESULTS



CHEM2050*

Intermediate Chemistry 1

This course contains theory for both inorganic, organic chemistry as well as chemical kinetics that a student will need to advance to third level chemistry. Topics covered will include: Synthesis & mechanism in organic chemistry; Transition Metal Chemistry; Bonding and Molecular Orbital Theory; Chemical Kinetics; Molecular Modelling; Stereochemistry; Strategies for complex syntheses.

[Original UQ Description](#)

ADVANTAGES

- If you enjoyed CHEM1200 and want to know more about organic and inorganic bonding and reactions, then this is the course for you.
- Small class size so the lectures tend to be tailored towards the questions you ask and you have many opportunities for one-on-one time with lecturers.
- Assessment is quite heavily weighted towards in-class quizzes. This can be annoying during the semester, but there is a lot less pressure for the final.
- This course can be helpful for GAMSAT preparation.

DISADVANTAGES

- Memorising all the organic reactions can become a little tedious.
- The in-class quizzes keep you on your toes for revision. While helpful, it is a little stressful at times.

TIPS AND TRICKS

- Because of the in-class quizzes, it's very helpful to keep on top of the content throughout the semester.
- Go to workshops! They will set you up for the final and there is plenty of opportunity to ask questions.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

CHEM1100
OR CHEM1020

AND

CHEM1200
OR CHEM1030
OR CHEM1010

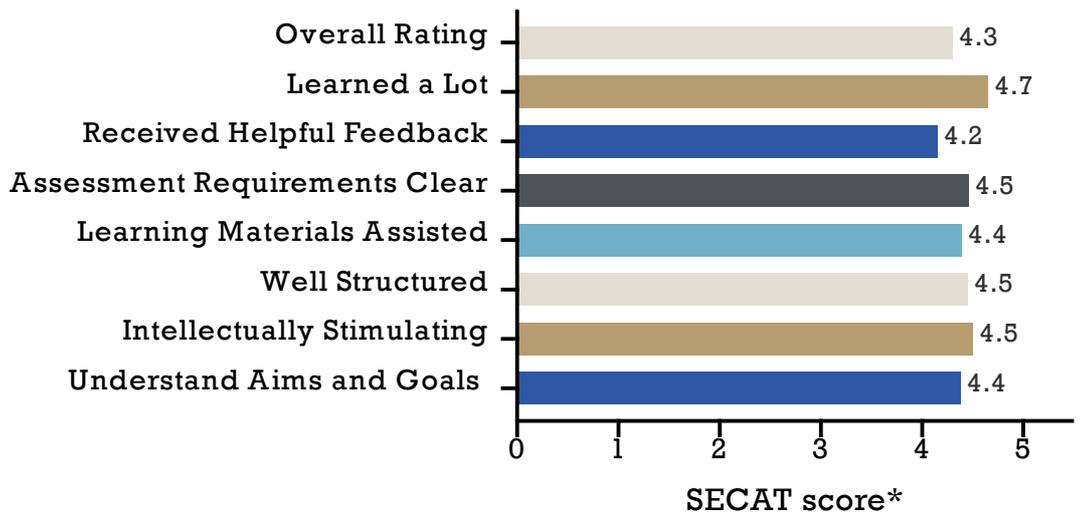
Class Contact Hrs

3 Lecture

3 Contact

1 Tutorial

SECAT RESULTS



*2019 SECaT, 2020 unavailable

CHEM2052*

Chemical Biology

This course focuses on the application of principles of inorganic & organic chemistry to the understanding of biological function at the molecular level. Topics covered will include functional group chemistry in a biological setting, mechanistic enzymology, chemistry of coenzymes & vitamins, chemistry of biosynthetic pathways, computational & spectroscopic methods in chemical biology, metal ion acquisition & speciation in biological systems, metallo-proteins, role of metal ions in disease states. This is a key course for those undertaking the Chemical Biology stream of the Chemical Sciences dual major & for students wishing to continue with Chemistry that is relevant to Biological & Biomedical Sciences.

[Original UQ Description](#)

ADVANTAGES

- A fun course that examines the role of chemistry in biology. You will learn a lot more about the details of biological reactions than you may have covered in previous courses.
- Targeted at extending the chemistry knowledge of people who are studying a major in the biological/biomedical field, and may be useful for GAMSAT preparation.
- Quite a **small class size**, meaning that there is time to engage with lecturers directly.

DISADVANTAGES

- The video assignment is very time consuming.
- A lot of the content overlaps with other courses (CHEM2050, BIOC2000) and can feel a little basic, especially if you have done some university-level chemistry before taking this course.
- The midsem is quite heavily weighted, which can be stressful. But it does mean that the final is a bit smaller.

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

CHEM1200
OR CHEM1010
OR CHEM1030

AND

CHEM1100
OR CHEM1020

Recommended

BIOL1020

Class Contact Hrs

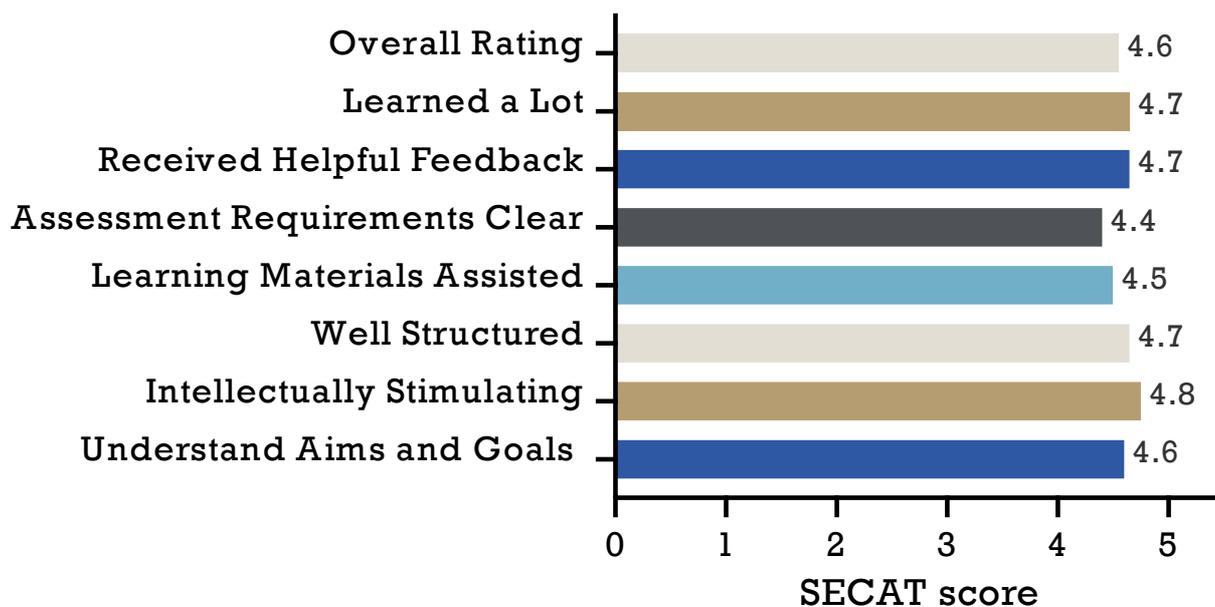
3 Lecture

3 Contact

TIPS AND TRICKS

- Don't leave the assignments too late– they will take more time than you think.
- This course assumes quite a bit of first-year chemistry knowledge. It would be helpful to revise this early in the semester.
- The bioinorganics module at the end is very interesting but quite challenging. Don't wait until SWOTVAC to learn it.

SECAT RESULTS



ERTH2002

Paleobiology

This course will explore the history of Earth's life, from the dawn of the planet some 4.5 billion years ago, to the present. In EARTH2002: we will: examine the processes that can lead to the preservation of organic remains over geological time periods; explore key evolutionary and extinction events that have shaped the world around us; and investigate many of the ways in which we can make inferences about biological processes from the limited, often biased information preserved in the fossil record. Most importantly, you will gain a thorough understanding of the application of the fossil record to contemporary problems in the Earth and Biological Sciences. Content will be delivered in the form of 'contacts' where classes will include both theoretical and practical components. There are additional costs for the field trip.

[Original UQ Description](#)

ADVANTAGES

- The excursion where you look for fossils was fun, despite being restricted to a smaller area due to COVID.
- Zoom sessions are long (2 hour sessions twice a week) but are engaging – a lot it is listening to others' presentations and discussing concepts. Also, they don't usually run for the full 2 hours.

DISADVANTAGES

- Long assignments and prac sheets.
- Not much teaching about dinosaurs.

TIPS AND TRICKS

- Prac quizzes are challenging and closed-book so make sure to complete prac exercises and revise before the quizzes.
- Mid-sem and final exams were relatively easy, but they are fairly long, so focus on pacing yourself.

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Recommended Prerequisites

BIOL1030

OR

ERTH1000

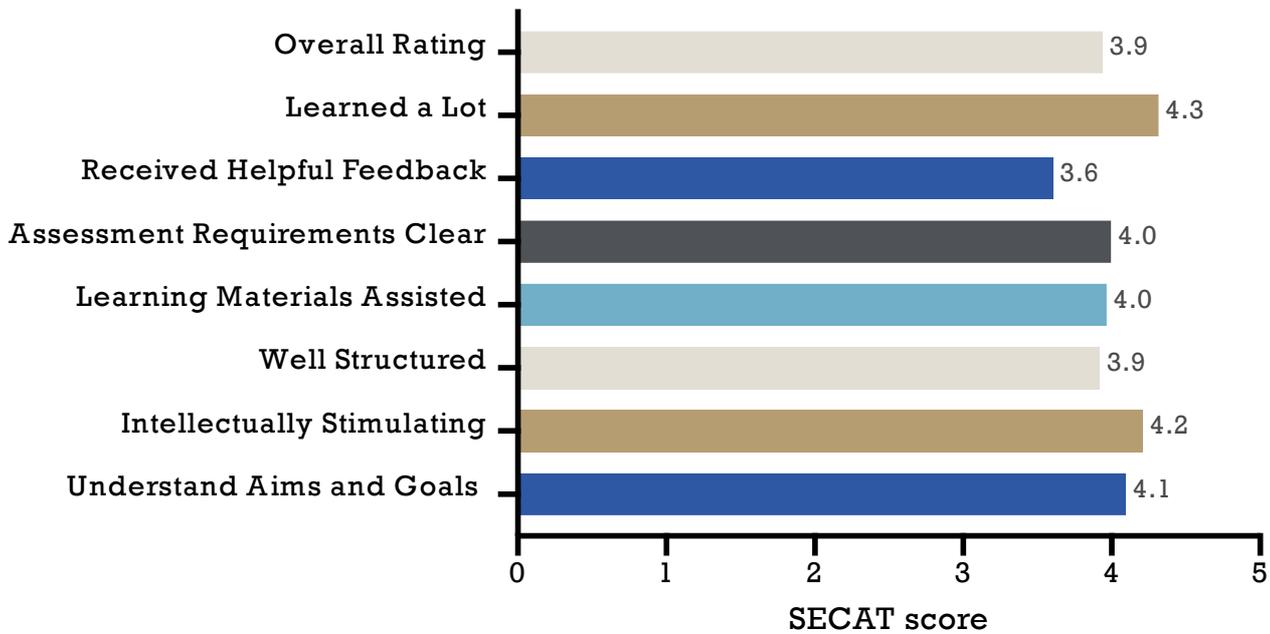
Class Contact Hrs

5 Contact

Fieldtrip

- Each week there are practical exercises which are based on online/in-person fossil specimens – these are very long but make sure to read text info that goes along with it.
- Not much is taught about dinosaurs, so don't do the course for that reason. Nevertheless, you gain a good understanding of evolution, past life forms and extinction events.

SECAT RESULTS



MICR2000

Microbiology & Immunology

This course explores the diversity of microorganisms, their cellular biology, growth & nutrition, metabolism, & basic genetics. The role of microorganism in disease, as well as their ecology & applications in biotechnology is also examined. Students will gain an insight into the immune response to infection by studying the innate, humoral & cellular immune systems & their functions in health & disease. The practical component of the course will include laboratory experiments to demonstrate principles learned in the lectures, where students will gain practical skills in safely handling microbial cultures for isolation & identification. The course provides the fundamental knowledge & skills needed to proceed further in microbiology, but also for all courses or disciplines involving molecular biology & biotechnology.

[Original UQ Description](#)

ADVANTAGES

- Jack Wang as course co-ordinator: 10/10

DISADVANTAGES

- The exams were open-book, but they were as difficult (or more difficult) than closed-book exams.

TIPS AND TRICKS

- The podcast gets a lot easier once you get started, so get started early.
- Compile example exam/previous exam questions into a document as the real exams had very similar questions.
- Piazza had good info prior to exams.
- Assignments are not too difficult and podcast assignment is quite fun.

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

BIOL1020

Recommended Prerequisite

BIOC2000

Recommended Companion

BIOL2202

OR

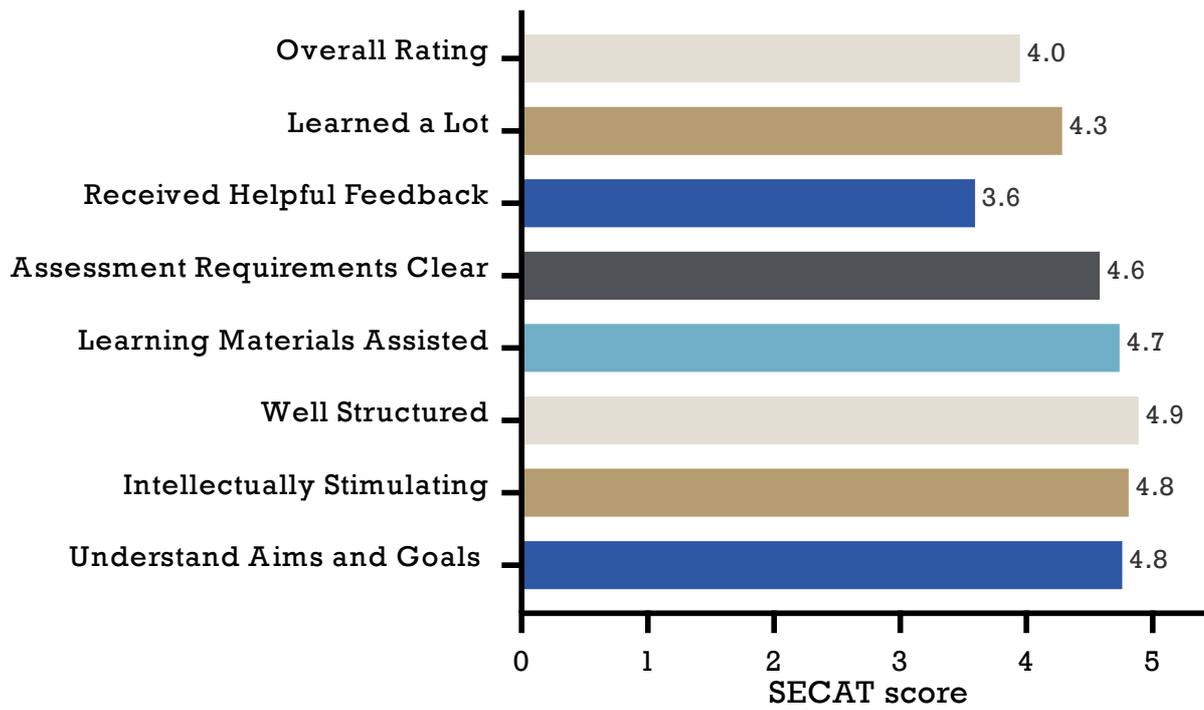
BIOL2902

Class Contact Hrs

3 Lecture

3 Practical

SECAT RESULTS



PSYC2040*

Social & Organisational Psychology

How are your feelings and actions influenced by other people? This course explores how the social environment affects behaviour, thinking and attitudes of individuals and groups. Topics include love and hate, conformity and individuality, group processes, communication and psychology in the work environment.

[Original UQ Description](#)

ADVANTAGES

- The lecturer was very friendly and approachable. Strongly encouraged audience participation with lollies during lectures throughout the semester. The course provided an explanation of the first-year social psych course PSYC1030, and also covered quite a bit of material on organisational psychology, something which most people don't realise is vital to many aspects of society.
- The course is very interesting and provides a welcome change from the 'hard science' that biomedical sciences is mostly comprised of. There are many real-world applications.
- The assignment, where you design, collect and report your own social experiment, is also very interesting. This provides an opportunity to develop scientific skills and experience real-world research.

DISADVANTAGES

- For premedical students, this course has little relevance to biomedical science nor to medicine in general.
- Unlike many of the other psychology courses, attending these tutorials is more or less compulsory due to the group orientated nature of the assignment. Failure to attend severely hampers your ability to complete the assignment to the strict timeline, and also lets your assigned group down.

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Companion

PSYC1040, if not taken in first year

Recommended Prerequisites

PSYC1020

OR

PSYC1030

Class Contact Hrs

2 Lecture

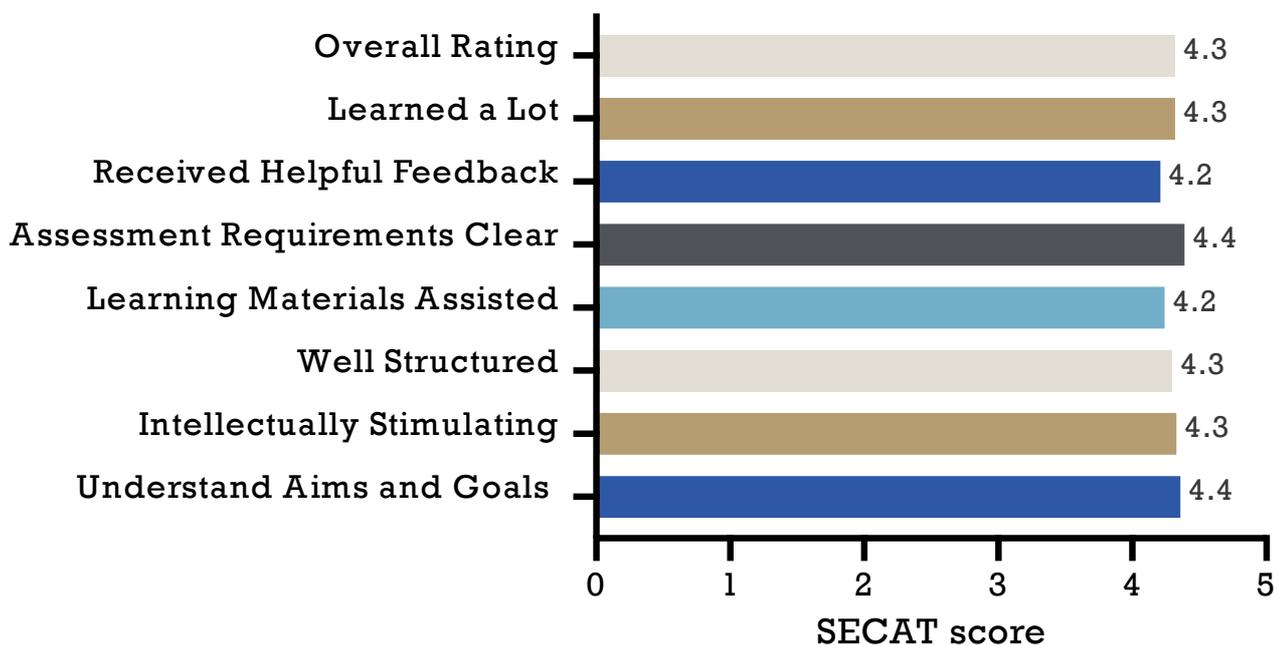
2 Tutorial

- The assignment also requires quite a bit of your own time in gathering data (usually from the general UQ community).

TIPS AND TRICKS

- Good course to choose if you are interested in social and organisational psychology and want to do something different to biomedical science.
- Pay attention and write notes during the lectures or recordings, as often times, the lecturer will have a single point on the slides, but only elaborate on it verbally. Everything she says is examinable, so notes are very important.

SECAT RESULTS



PSYC2050

Learning & Cognition

This course is concerned with how the mind works. Cognitive topics include memory, imagery, language, intelligence and comparative psychology. The course also focuses on learning including the experimental analysis of behaviour as derived from principles of associative learning. Laboratory sessions will focus on training of skills including gathering, analysing and presenting information, and in providing feedback.

[Original UQ Description](#)

ADVANTAGES

- This course is a more in-depth look into the behavioural and cognitive psychology introduced in the first-year course PSYC1020.
- The course is well-structured, being split into three main sections.
- The assignment is a report on a self-designed, self-participant experiment. It's quite flexible in what topic you can choose to research, and provides valuable experience and practice in writing scientific articles.

DISADVANTAGES

- Most lectures are spent on historical research and results, which are often not examined.
- There are many lectures which are not particularly interesting and tend to be on the drier side.

TIPS AND TRICKS

- Start thinking of an experiment to do as soon as the assignment is introduced in the tutorials. It is extremely difficult to find something relevant to yourself as well as the lecture topic, while also having enough journal articles to provide background.
- Do not miss tutorials – the experiments are interesting, and provide excellent practice for writing your

GENERAL INFORMATION

Offerings

Semester 1

Semester 2

Modes available

Flexible

External

Internal

Companion

PSYC1040, if not taken in first year

Recommended Prerequisites

PSYC1020

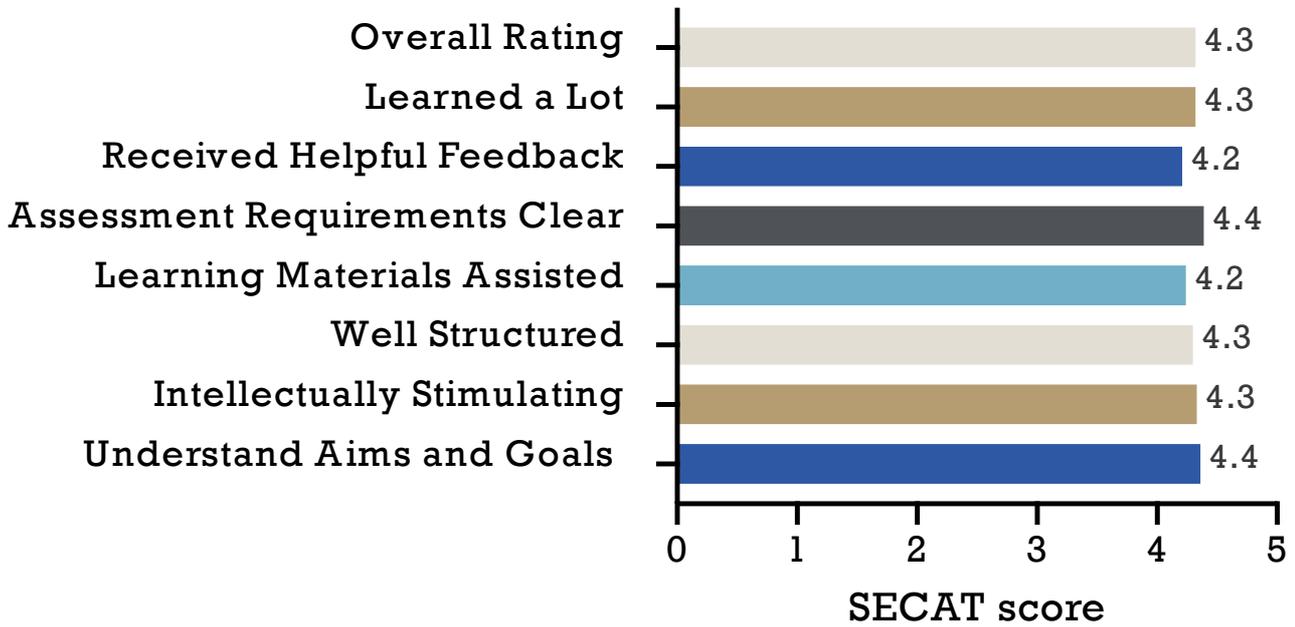
Class Contact Hrs

2 Lecture

2 Practical

assignment as you write an easy example section based on each week's experiment. It's also worth easy marks.

SECAT RESULTS



ANAT3022

Functional Neuroanatomy

Up-to-date concepts & notions of human brain & behaviour for science and psychology students. Emphasis on factors which define brain structures & functions & cognitive functions. Practical classes based on histology and macroscopic anatomy.

[Original UQ Description](#)

ADVANTAGES

- Great course.
- Great staff.
- Great content.

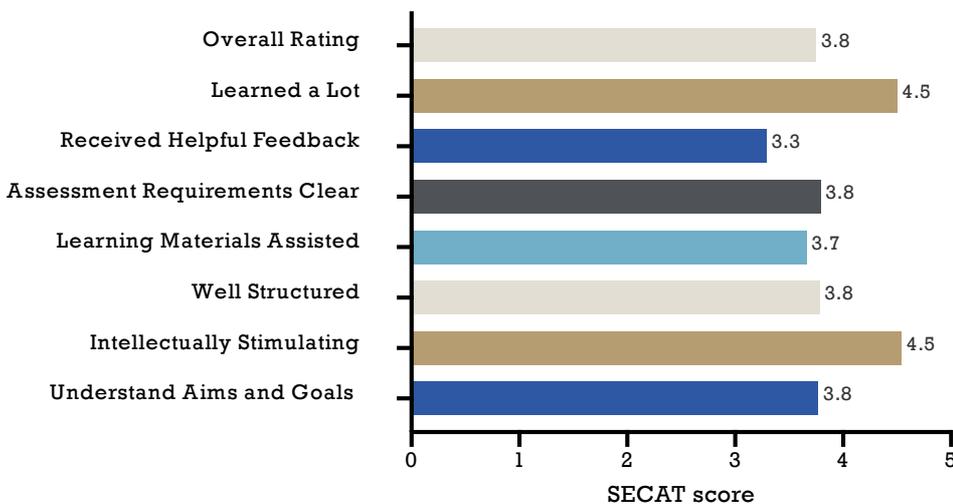
DISADVANTAGES

- A lot of work due to the complexity of anatomy.

TIPS AND TRICKS

- Keep up to date with content.
- The tutors are very helpful and basically your best friends.

SECAT RESULTS



GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Prerequisites

BIOM2020

OR

PSYC2020

Class Contact Hrs

4 Contact

BIOC3003

Human Molecular Genetics in Health & Disease

BIOC3003 is an advanced research-informed course on the molecular genetics of human disease. Topics include: single gene disorders, multifactorial disorders; cancer genetics; birth defects; epigenetics; identification and analysis of human disease genes. The course content is designed to provide students with a contemporary overview of human genetic disorders, genetic variation and on how mutations are identified and assessed for their contribution to phenotype. In addition, the course covers some aspects of clinical management of genetic diseases and information on the genetic tools used for their diagnosis, prognosis and treatment.

[Original UQ Description](#)

ADVANTAGES

- This was a very interesting course which consisted of various modules conducted by different professors, all of whom were very skilled. Hence, if you're interested in learning about different aspects of molecular genetics and diseases then this is the course for you!
- No mid-semester exam.
- Final exam was open book, but wasn't too difficult as some open book exams can be.
- Some modules in the course had a strong focus on experimental design and findings from past research. Sometimes this helps to understand how a conclusion about a specific concept was reached, but it can also distract as the content seems flooded with experiment after experiment.

DISADVANTAGES

- Although the lectures were interesting, the practical component of the course was not super engaging. There was only a Q and A session for the practical and a lab report, with no scheduled practical zoom sessions with tutors for the external students.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOL2202

OR

BIOL2902

Recommended Prerequisites

BIOC2000,
BIOL2200,
BIOL2006,
BIOL3004

Class Contact Hrs

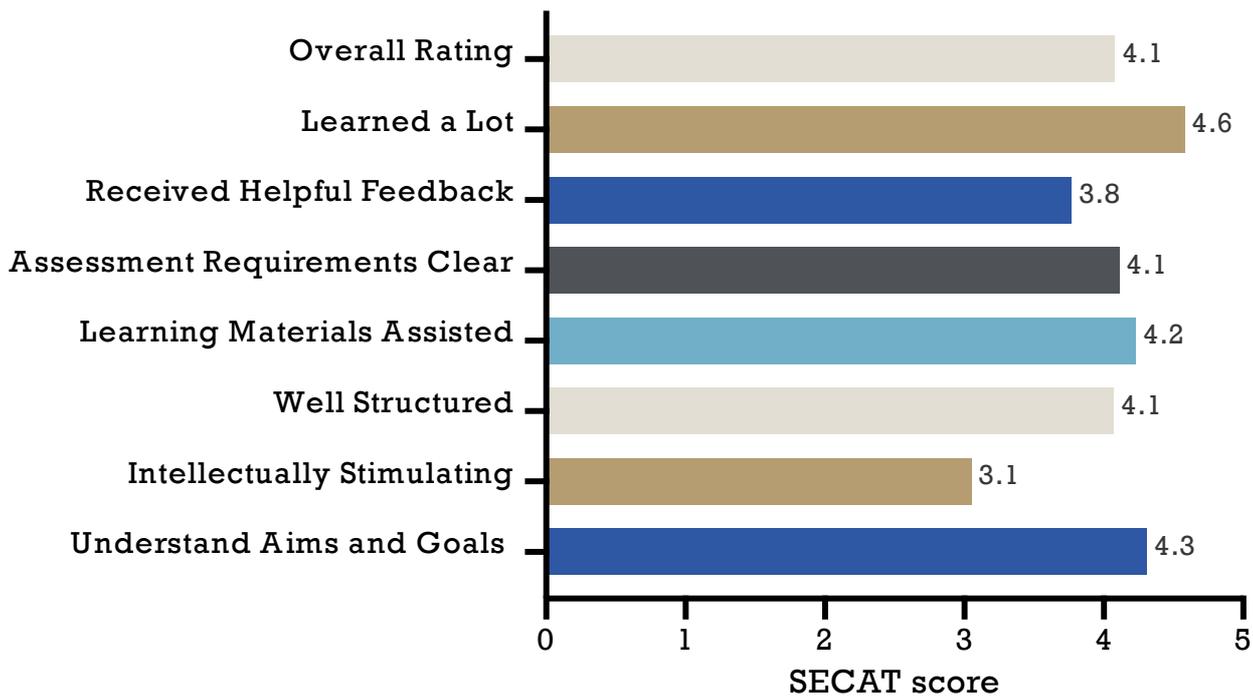
3 Lecture

1.5 Contact

TIPS AND TRICKS

- This course had a lot of self-directed online learning exercises, so don't forget to keep an eye out on the deadline for the quizzes that are due!
- Make sure to engage in the PBLs, as there are marks awarded for participation.
- Prepare for PBL quizzes early! The revision questions are normally the PBL quiz questions (sometimes with slight alterations), so if you write up some responses early, you can ask your tutor to take a quick look through before your PBL quiz.

SECAT RESULTS



BIOC3006

Biochemistry of Metabolism in Health & Disease

This course provides an introduction to metabolism at the molecular level. The content will be presented in the context of the normal, exercise and disease states. Applications and examples drawn from current research areas with an emphasis on the metabolic syndrome. The course will build on and extend knowledge gained in the second level course BIOC2000 and will include the modern discipline areas of metabolomics and nutrigenomics. Core topics include aspects of carbohydrate, lipid, protein and amino acid metabolism built around the theme of obesity and the metabolic syndrome as an exemplar of the application of modern knowledge gained through our understanding of the genome and metabolome. The course will show how knowledge from these disciplines aids in our understanding of this health problem affecting many world-wide. The course is designed for those students who are interested or planning careers in the biomedical area, including health science, exercise science, nutrition/dietetics, food science and the biological sciences more broadly.

[Original UQ Description](#)

ADVANTAGES

- This course was not too reliant on its prerequisites (BIOC2000 or CHEM1222) or the other recommended prerequisites (BIOL1020 and BIOL1040), so don't be afraid to choose it if you're interested in it.
- The end of the semester test was actually quite engaging in that it tested you on problem solving skills, rather than your memorisation of the contents.

DISADVANTAGES

- Requires a strong grasp and deep understanding of the contents.
- Considering that there's quite a few modules and no mid-sem exam, this is still a very content heavy course.

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

BIOC2000

OR

CHEM1222

Recommended Prerequisites

BIOL1020

AND

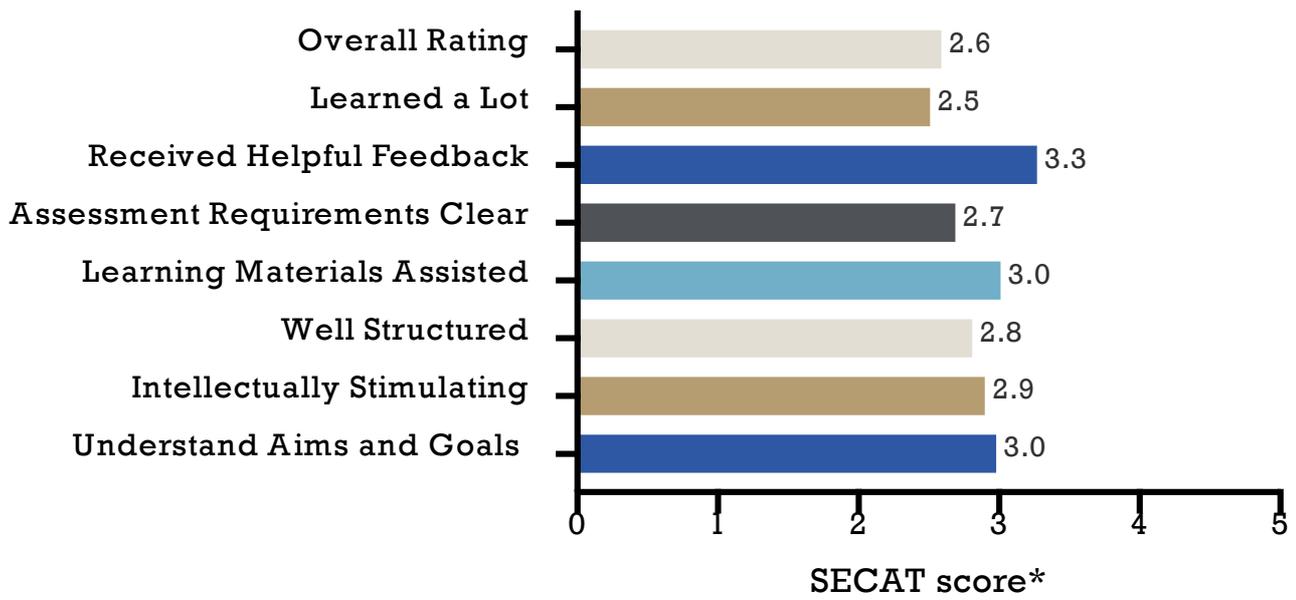
BIOL1040

Class Contact Hrs

3 Lecture

3 Practical

SECAT RESULTS



*2019 SECaT, 2020 unavailable

BIOL3003

Immunology

This course covers advanced topics in immunology and is suited to students with some background knowledge of immunology. Topics covered include the molecular basis of immune recognition, regulation of the immune response, mechanisms of host response against infectious pathogenic agents, transplantation, vaccine design, immunodeficiency and other immune disorders. Oral and poster presentation tasks are designed to reinforce the lecture material.

[Original UQ Description](#)

ADVANTAGES

- Enjoyable and stimulating course for students interested in immunology from second year courses (MICR2000 and BIOM2012).
- Lecturers present well and are generally clear on what they really want students to know.
- Assignments are worth a very generous amount and are not difficult to do well in as long as sufficient effort is put in.
- Lecturers try and revise content briefly before moving on to the new material.

DISADVANTAGES

- Content is very dense and requires a fair bit of ROTE learning (there's no way around it).
- The course covers a broad range of topics, so it is likely that the students won't enjoy all of them.

TIPS AND TRICKS

- Be familiar with some basics of immunology from second year (MICR2000, BIOM2011) before beginning the course, although the lecturers do cover them briefly.
- When studying, try finding the main functions and effects of the cytokines and factors and linking that to

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

MICR2000

OR

BIOM2011

Recommended

BIOC2000

AND

BIOL2200

Class Contact Hrs

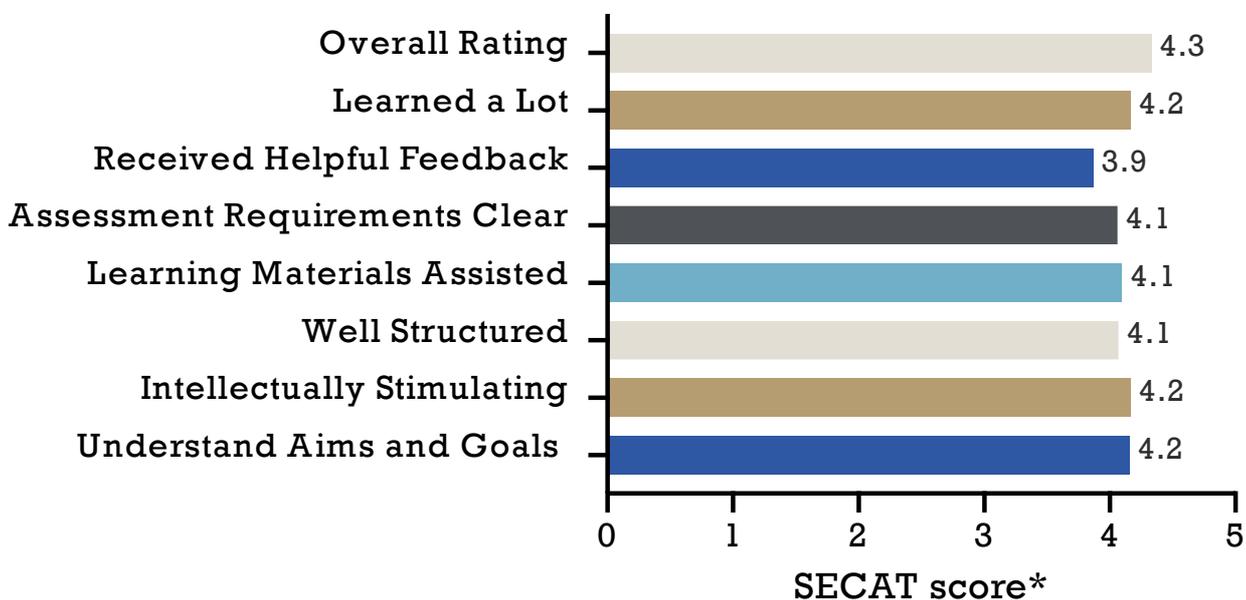
3 Lecture

3 Contact

what each cell wants to do. This reduces the amount of ROTE learning that needs to be done.

- Do the research on the presentation and posters early and find a general direction. Follow the topic instructions exactly (i.e. target every word in that sentence and make sure everything is covered).
- Practice presenting and explaining your poster – appearing confident on the day is vital. Also, learn the figures you have used and their conducted assays, as some questions will target them and you can show you have really done the work instead of copy-pasting figures.
- The textbook is very helpful if you can obtain one; many of the diagrams used by lecturers are directly from the textbook (which has the accompanying text).

SECAT RESULTS



*2019 SECaT, 2020 unavailable

BIOL3006

Molecular Cell Biology II

This course examines cellular structure & function at the molecular level and integrates the disciplines of biochemistry, molecular biology, structural biology, and molecular genetics. This is an advanced course that utilizes current published research as the medium to instruct on topics such as methods in molecular cell biology, cell architecture, cell interactions, the nucleus, cell differentiation and cellular dynamics. The final topic discusses the role of molecular cell biology in the diagnosis and treatment of disease.

[Original UQ Description](#)

ADVANTAGES

- It is not hard to do well in this course, especially because most of its content is rehashing BIOL2200 (with a few additions).
- Two lecturers preferred to work using the projector rather than PowerPoint slides. While unconventional, this method can actually be more digestible, as they were stepping through their content slowly as they drew diagrams. Both lecturers provided typed notes on Blackboard which were great summaries of their modules.

DISADVANTAGES

- Has some ROTE learning involved (especially names of molecules and proteins).

TIPS AND TRICKS

- The exam is all SAQ, but most lecturers have broken down their questions very well so you can understand how marks are allocated.
- Many lecturers tend to reuse their questions so definitely check out the past exams (don't use this as your only revision method though).

GENERAL INFORMATION

Offerings

Semester 2

Modes available

Flexible

External

Internal

Prerequisites

BIOL2200

Recommended

BIOC2000

AND

BIOL2202

OR BIOL2902

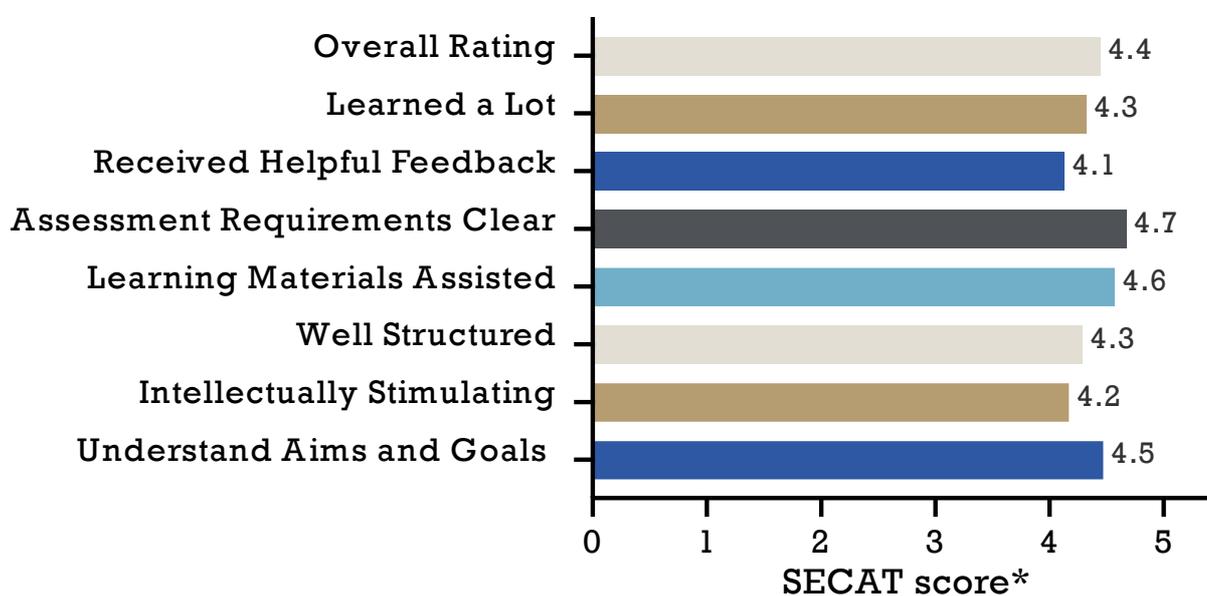
Class Contact Hrs

3 Lecture

2 Contact

- The group presentation on Research Approaches is very easy as long as you hit all the points on the criteria. The PowerPoint goes through exactly everything you need beforehand.
- PBLs are very easy as long as you engage and make sure to clarify any confusions with your tutors.
- The best method of revising for this course was generally to find a really big whiteboard and draw out molecular processes over and over. It is also really good to get in a group and test each other on this! If your exam is an online proctored exam, you won't be able to actually draw the diagram on your computer, but going through the process of visualising it helps a lot for describing it in words.

SECAT RESULTS



*2019 only, 2020 unavailable

BIOM3002

MD RECOMMENDED

Human Biomedical Anatomy

Gross morphology, structural inter-relationships & the functional anatomy of the human viscera as revealed by cadaveric dissection, with focussed topics addressing anatomical variations, pathology and histology of given organ systems.

[Original UQ Description](#)

ADVANTAGES

- The course coordinator (Dr Oliver Rawashdeh) was very fair and approachable.
- Builds on BIOM2020 knowledge.
- Gives a really good overview on anatomy.
- Lectures are ordered by focus on anatomical systems (i.e. covers the Integumentary system, then the thorax, then the cardiovascular system etc.).

DISADVANTAGES

- Can be a bit confronting if this is your first anatomy course.
- Heavily memory based.
- The amount of content can be very overwhelming.
- Feels a bit disjointed when jumping between different lecturer styles.

TIPS AND TRICKS

- Very content heavy – having in person classes is critical for dissection courses otherwise you miss out on so much.
- Flashcards are your friend (like Anki). This is especially if the practical exam is online, as the 2020 course was based off the Anatomy Atlas referenced in the course resources.
- Unfortunately, due to COVID, the dissection part of the course was replaced with writing a dissection manual. This was not particularly enjoyable and was tedious to

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Internal

Prerequisites

BIOIM2020

Recommended

BIOM2012

Class Contact Hrs

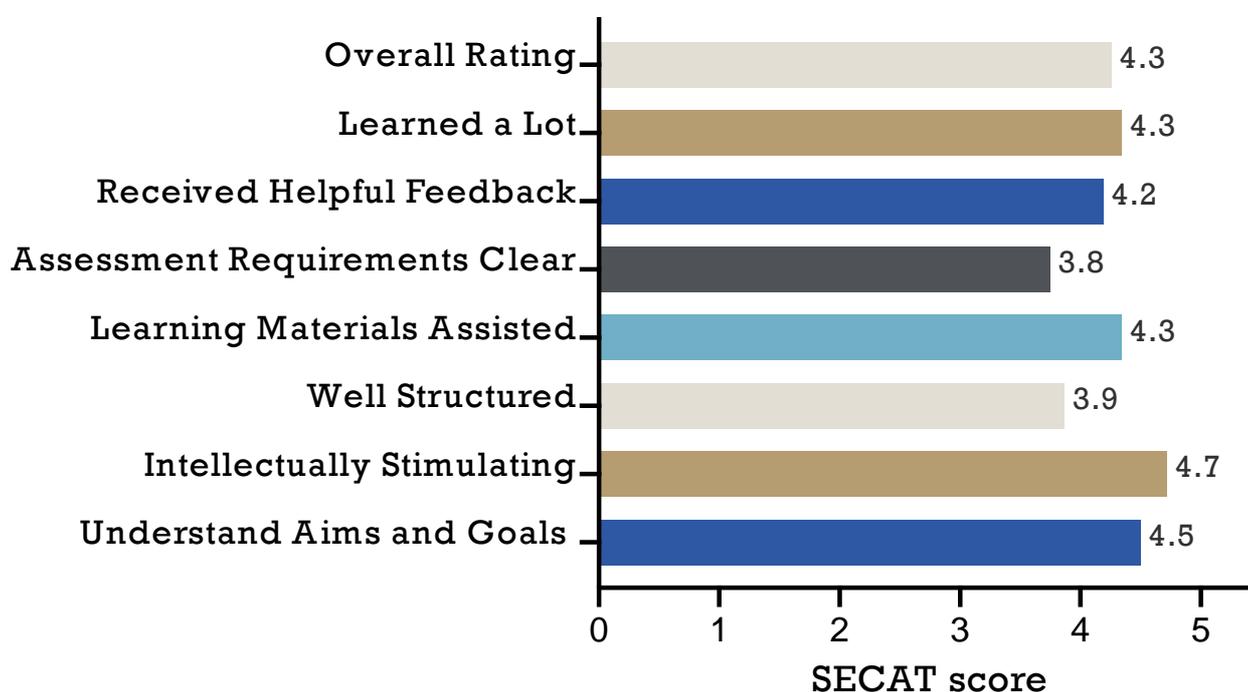
3 Lecture

3 Practical

write. However, the anat demonstrators are absolutely amazing and can be really great resources for both writing the report and revising the content for the week. It can be really hard to stay engaged with them over zoom calls, but a lot of them put heaps of effort into putting together information for you, especially if you've expressed you're confused about anything.

- Even if your "Practical" sessions with the anatomy demonstrators are online, don't skip these, as these sessions are good for you to consolidate any information that you've learned so far about a particular system.
- It's really good if you are able to stay ahead of the content or at least be up-to-date, as the demonstrators will be focussing their sessions on the lectures for that week. It can feel really scary and like you have no idea what's happening if you've fallen behind.
- Although it is tempting to focus on just identification of anatomical features when revising for the practical exam, it is best to go over all the content all together, as some questions will probe further into the function or related pathologies.
- The theory exam can sometimes ask questions that seem like obscure details mentioned on a single slide.

SECAT RESULTS



BIOM3003

Functional Musculoskeletal Anatomy

Recent advances in research are used to explain and highlight the interplay between orthopaedic biomechanics, muscle function and neuromuscular control in human posture and locomotion. Experimental components are integrated with theoretical knowledge.

[Original UQ Description](#)

ADVANTAGES

- Really good for functional anatomy knowledge, good way to brush up on your functional anatomy and physics as well (if you're doing GAMSAT).
- Very practical information.
- Get to do dissections, which is super fun.

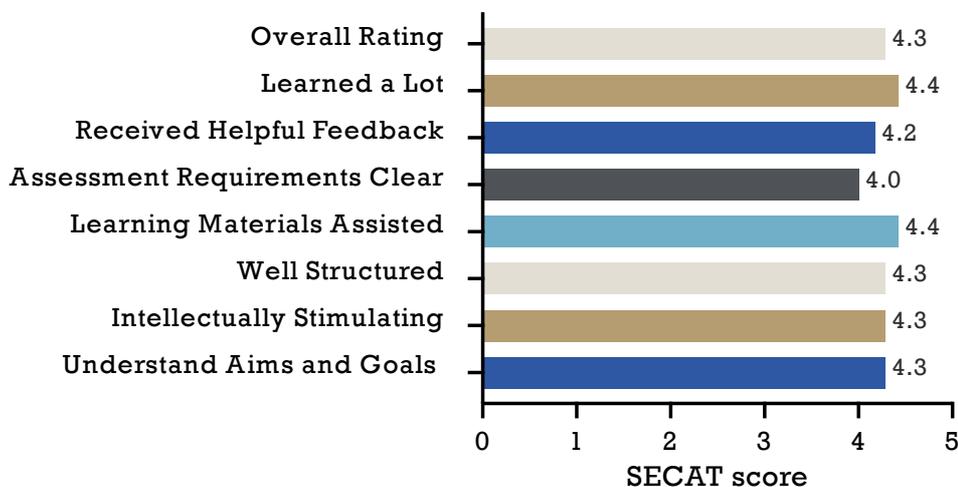
DISADVANTAGES

- Topics can be boring for people who don't have physics knowledge.

TIPS AND TRICKS

- Prerequisite knowledge is super important, as well as keeping close contact with the course coordinators.

SECAT RESULTS



GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

BIOM2020

Recommended

BIOM2012

Class Contact Hrs

3 Lecture

3 Contact

BIOM3014

Molecular & Cellular Physiology

Students will examine core systems in molecular & cellular physiology & develop an understanding of how they maintain homeostasis & how the failure of these systems translate into disease.

[Original UQ Description](#)

ADVANTAGES

- Interesting if you like physiology and cell function – it really goes into detail about all the topics in 2nd year that you were told to brush over.
- Prepares you for BIOM3015 (pathophysiology) which is a really good course for medicine.

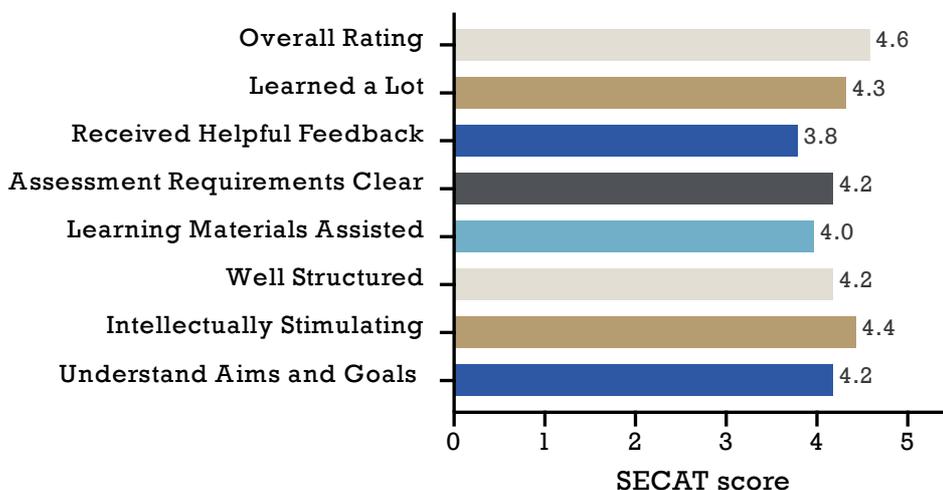
DISADVANTAGES

- A lot of memorising and some concepts can be hard to grasp, especially since for some areas, a lot of stuff is still being researched and our knowledge is purely theoretical.

TIPS AND TRICKS

- It's a pretty hard course that requires many hours of study, which was quite unexpected.

SECAT RESULTS



GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOM2012

OR

BIOL2200

Class Contact Hrs

3 Lecture

3 Contact

BIOM3015

MD RECOMMENDED

Integrative Physiology & Pathophysiology

Students will examine how physiological systems maintain health throughout life & how these systems change with ageing & disease. Pathophysiology will be introduced as a basis for understanding the consequences of disease.

[Original UQ Description](#)

ADVANTAGES

- Really interesting and practical information for those going into pathology/medicine.
- It teaches you a lot about how people get sick and why they are sick.

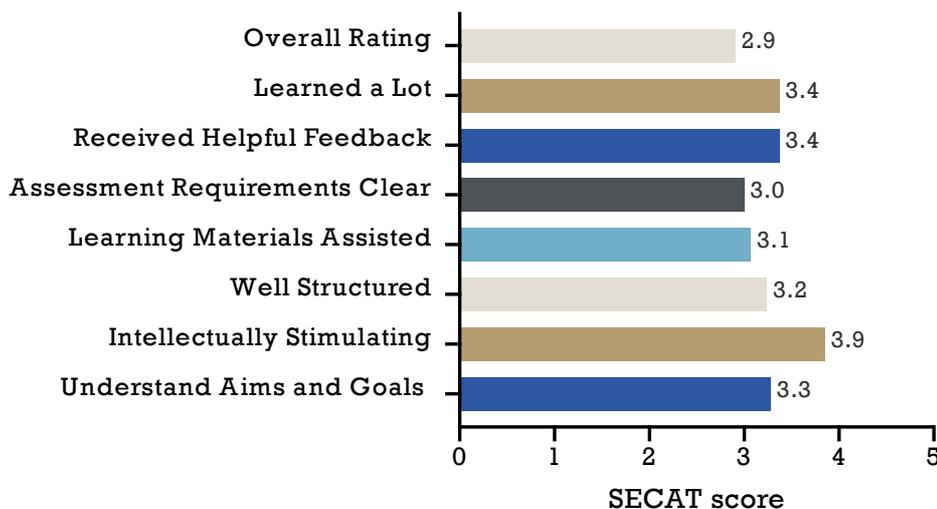
DISADVANTAGES

- Have to stay on top of your work as the workload is pretty high.

TIPS AND TRICKS

- Really need to stay on top of all your topics weekly to be ready for this course, since different kinds of pathology are explored each week.

SECAT RESULTS



GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Internal

Prerequisites

BIOM2012

Class Contact Hrs

3 Lecture

3 Contact

BIOM3020

Integrated Endocrinology

An advanced course providing an integrated approach to the biochemistry, molecular biology, physiology, pathology and pharmacology of the endocrine system. Secretion & physiological roles of blood-borne & local hormonal mediators. Molecular signalling systems and other mechanisms used by hormones to regulate cell growth, metabolism, reproduction and other functions.

Consequences of and treatments for defects in the endocrine system illustrated with clinical disorders that affect many people world-wide, such as those arising from obesity.

[Original UQ Description](#)

ADVANTAGES

- The course coordinators are amongst the best and most engaging lecturers in biomedicine. They were great at communicating and putting out helpful additional resources.
- Interesting and rewarding course despite its challenges.

DISADVANTAGES

- Body composition assignment can be a bit daunting if you do not have a good grasp of report writing/statistics from second year.
- Extremely content heavy.
- Some module overlap can be confusing.

TIPS AND TRICKS

- Stay up to date each week and that'll ease the stress of studying during SWOTVAC.
- Compared to other courses, there isn't as much detailed content (e.g., remembering the names of different receptors, chemical messengers, etc), but there is a breadth of different topics, so staying organised is still a must.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOM2012

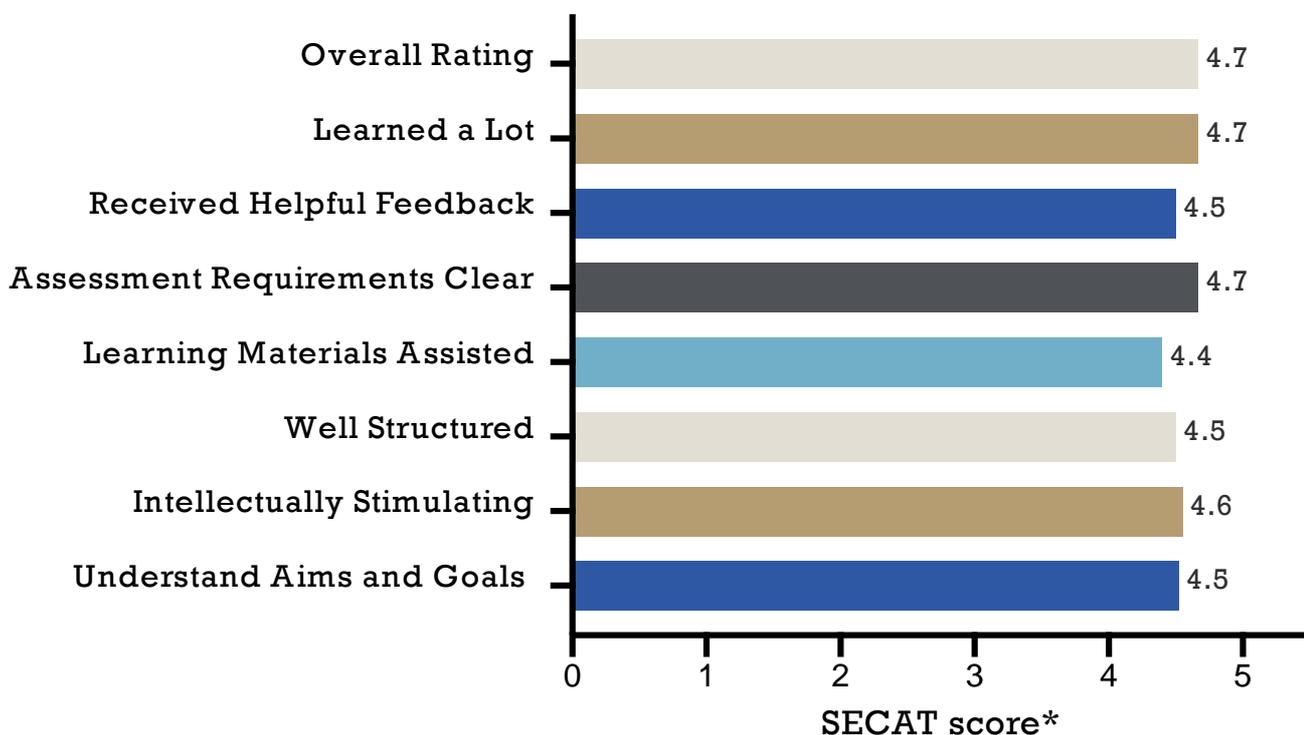
Class Contact Hrs

3 Lecture

3 Contact

- The "Hot Topic" Assessments are very short and pretty fun to write. It is best to be concise with these.
- As there are quite a lot of different modules, have a look at the past exams early on in the semester to get an idea of what to study.
- The online practicals can be a little confusing at first, but there is a lot of information provided to walk you through these. It is best to get started early on the practical reports (as small as they seem) because it can easily get overwhelming to write and submit these, especially when other assessment is due around the same time.
- Some of the lecturers lack comprehensive notes, so it can take more time to get through and understand the content compared to other modules.
- There appears to be some overlap between some modules, so make sure that you understand the distinctions between what each lecturer covers, so that you can put the relevant information down in their questions in the exam.
- Try and remember any specific genes/proteins and isoforms that are named. There was a question on the exam that asked for specific isoforms of a protein that were involved in a particular process.

SECAT RESULTS



*2019 SECaT, 2020 unavailable

BIOM3200

Biomedical Science

Students majoring in biomedical sciences will gain an appreciation of 1) the contribution of their specialisation to contemporary biomedical science & the potential benefits to the community 2) the importance of scientific ethics & 3) the importance of statistical and/or computational skills in analysis & interpretation of data.

[Original UQ Description](#)

ADVANTAGES

- Strong focus on translating and communicating scientific information to different audiences (namely other peers and a general audience), which is an important skill to have in the future, whether as researchers or medical professionals.
- No formal examinations, only assignments.
- The course splits into a research and clinical stream in the second half of the semester, so premed students can finetune their focus onto clinical papers/research.

DISADVANTAGES

- Marking was quite harsh, especially for the final individual assessment for the clinical stream (disseminating research to a general audience on a chosen topic out of 3 available topics).
- Some group assignments involved (and marks are awarded as a group, not individually), so it can be difficult if you don't have people you know well in the course.
- The instructions/criteria can seem vague, especially as there is no set formula for writing a paper for a general audience in an 'engaging and concise manner'.

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Prerequisites

BIOL2200

AND

STAT1201

AND

BIOM2012
OR BIOM2020
OR BIOL2202
OR BIOL2902
OR BIOM2402
OR BIOM2208
OR MICR2000

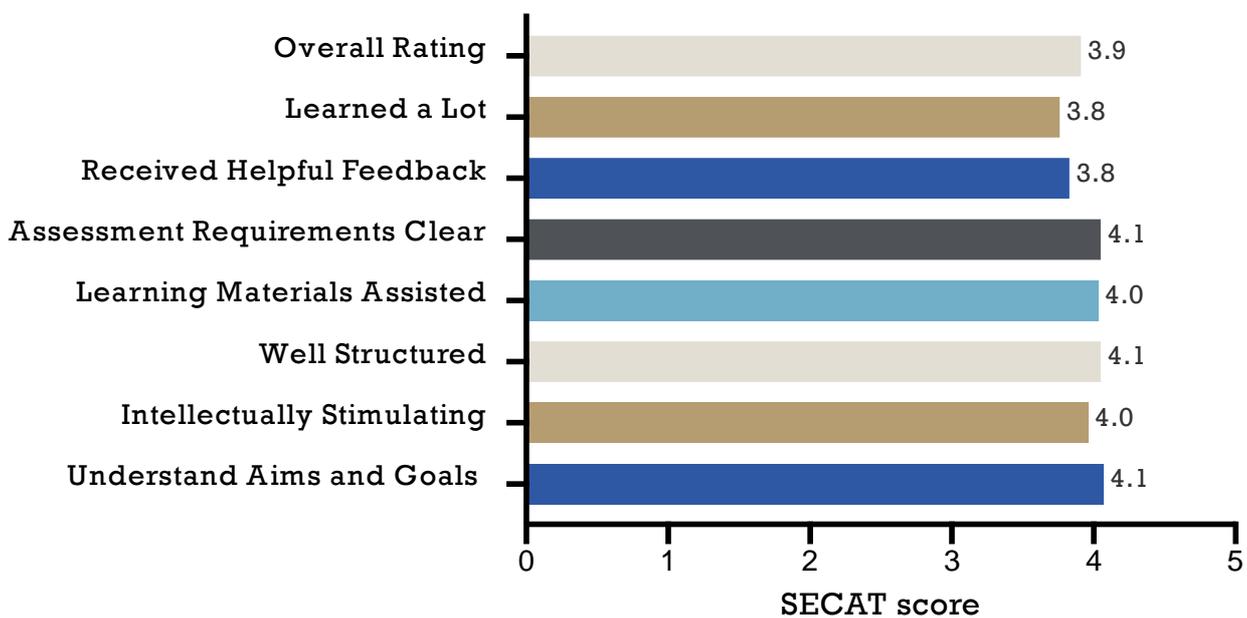
Class Contact Hrs

4 Contact

TIPS AND TRICKS

- Prepare for the workshops beforehand and do all the readings! It ensures that you can make the most of the workshop and follow along with what the tutors are explaining.
- Make sure to attend the workshops, even if they do seem boring. This ensures that you are well-equipped for the upcoming assignments, and is particularly important because they aren't recorded.
- Start the assignments early, especially the last one. It is very difficult to do well if you rush it, even if you leave yourself a week before the due date. By starting it early, you can get feedback from the tutors or bring up any questions you have.

SECAT RESULTS



BIOM3401 *

MD RECOMMENDED

Systems Pharmacology

Systems Pharmacology introduces students to the action of drugs on whole systems and provides an integrated approach to how drugs affect human physiology. Students will learn the effect of drugs on major physiological systems and how these effects can be beneficial or detrimental. Experimental experience is expanded to develop practical skills in core pharmacology methodology, drug measurements and drug effects.

[Original UQ Description](#)

ADVANTAGES

- The course has open–book exams: ROTE–learning and memorization are not key and can be a relief in exam time. Watching and understanding lectures comprehensively will get you most of the way through this course.
- Practicals are similar to BIOM2402 but involve more individual experimental design (like BIOM2011/BIOM2012), which may be interesting and/or challenging.
- Lecture content and course structure is similar to BIOM2402. If you enjoyed that, BIOM3401 will also be enjoyable.
- Material is clinically and pathologically centred, making the course interesting and relatable to everyday diseases such as psychological disorders, CVD, GIT drugs, cancer, anti–inflammatories and infectious diseases. You are likely to know some of this from BIOM2402 already.
- Like most 3rd year courses, the depth is comparable to medicine, but more spread out in format.
- The alcohol practical involves vodka.

DISADVANTAGES

- Open–book nature of the exam lends itself more towards problem solving and integrating knowledge

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOM2402

Recommended Prerequisite

BIOM2011

Class Contact Hrs

3 Lecture

3 Contact

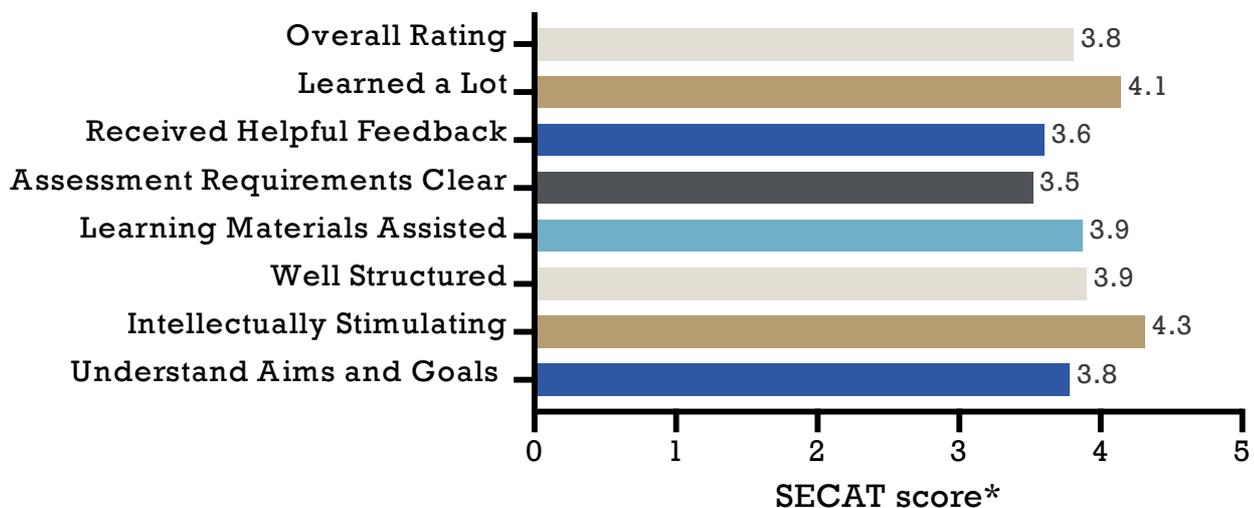
from all modules. Can be difficult on the spot especially with short time pressure and huge questions (30–mark essays).

- Designing your own experiment can be different and confusing if you are used to a straightforward practical. It requires a lot of knowledge retained from BIOM2402.

TIPS AND TRICKS

- Do not underestimate open–book exams, as the questions in the exam will mostly not be simple reciting or memorising. E.g. It may involve comparing/contrasting drugs and their mechanisms of actions for the same condition, and explaining why one drug may be better for a certain patient.
- It is important to make useful, comprehensive but understandable notes. Entire drug lists with easy to reference tabs and multiple types of indices to find drugs will save a lot of time in the exam. Borrowing a library textbook or bringing your own as a last resort to find a drug can be helpful.
- Most of the work for the practical is in the preparation and design of your method. Discuss and plan in advance to gain the most out of your practical session.

SECAT RESULTS



*2019 SECaT, 2020 unavailable

DEVB3002

Stem Cells & Regenerative Medicine

Leading expert scientists in biomedicine discuss the foundational principles, state-of-the-art technologies and medical applications in the burgeoning fields of stem cell biology and regenerative medicine. This course is relevant for students progressing into future careers in science and medicine.

[Original UQ Description](#)

ADVANTAGES

- Underrated course – definitely consider if you enjoy research.
- No practicals so not as many contact hours – something which is really appreciated if you are doing a more time intensive course, or you just need some extra time to work on GAMSAT/med applications.
- Interesting and engaging content. Sometimes lecturers also include the experiments involved and that makes concepts more understandable and logical.
- Improve public speaking/presentation skills through journal club. Easy to do well if you are passionate about the topic (you get to choose the focus at the start of the semester) and enjoy public speaking.
- Quizzes every 3–4 weeks keep you accountable for your learning and they are easy to do well in as long as you are up to date with course content.

DISADVANTAGES

- A lot of content to review if you leave it last minute.
- It is not as popular of a course, so it can be lonely if you enjoy group study.

TIPS AND TRICKS

- Stay on top of the content each week because there are small quizzes every few weeks and they can make and break your final grade.

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOM2208

Recommended

BIOL2202

OR

BIOL2902

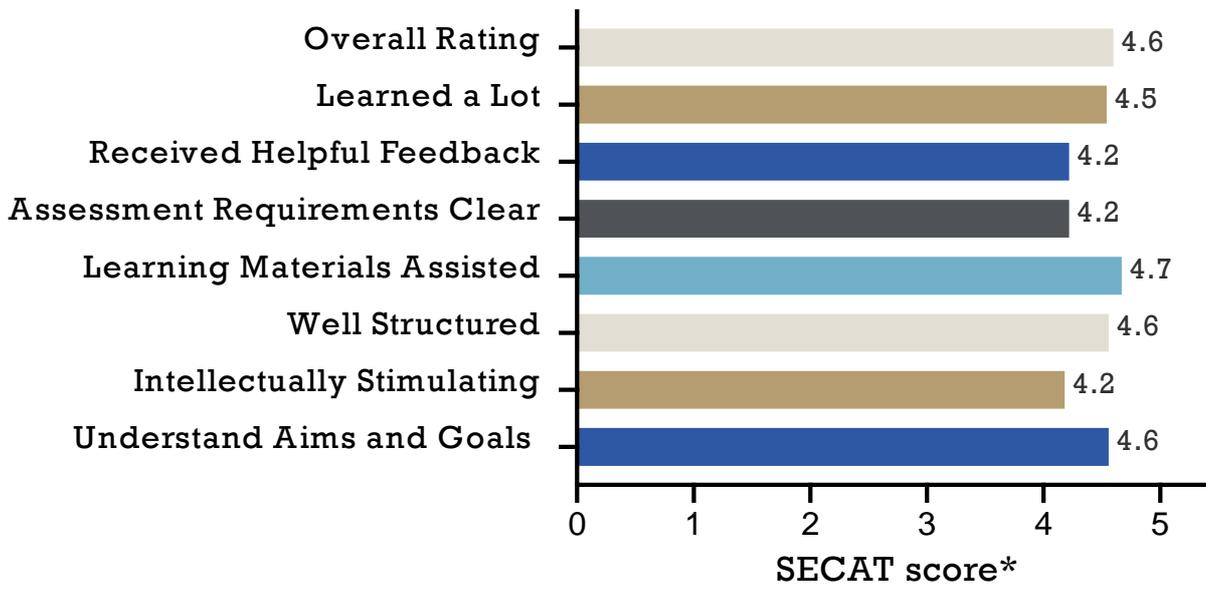
Class Contact Hrs

3 Lecture

1 Contact

- Use past exams to focus your study and prepare for the intra-semester quizzes.

SECAT RESULTS



*2019 SECaT, 2020 unavailable

NEUR3001 *

Molecular & Cellular Neuroscience

Introduces aspects of molecular & cellular neuroscience through lectures tutorials, presentations & SDLs. Part 1 will provide the basic information & Part 2 will place this information in the context of current developments in molecular neuroscience & neurochemistry.

[Original UQ Description](#)

ADVANTAGES

- The subject matter in this course was particularly interesting and built well on BIOL2200 and BIOM2011. Learning about the synapse on the molecular level and neuronal organisation fed well into the more applied part of the course investigating particular diseases of the nervous system.
- The journal club was arguably the best part of the course, enabling you to research and present the findings of a paper and interact with the presentations of others on similar topics. It also allowed you to get to know one of the lecturers on a more personal basis which was primarily helpful in getting advice on their module.

DISADVANTAGES

- The course was probably balanced in its advantages and disadvantages. The main problem was the lack of integration of some of the modules, especially given the course coordinator didn't even know how it linked together holistically.
- Assessment-wise, there were some vague questions in the final exam where the model answers didn't really relate to what was asked so in that sense, it is easy to do poorly even with sufficient study.
- Having guest lecturers for each disease/topic present only three lectures also made it slightly disjointed. However, some of these lecturers were not as good as

GENERAL INFORMATION

Offerings

Semester 1

Modes available

Flexible

External

Prerequisites

BIOM2011

Recommended

BIOL2200

Class Contact Hrs

3 Lecture

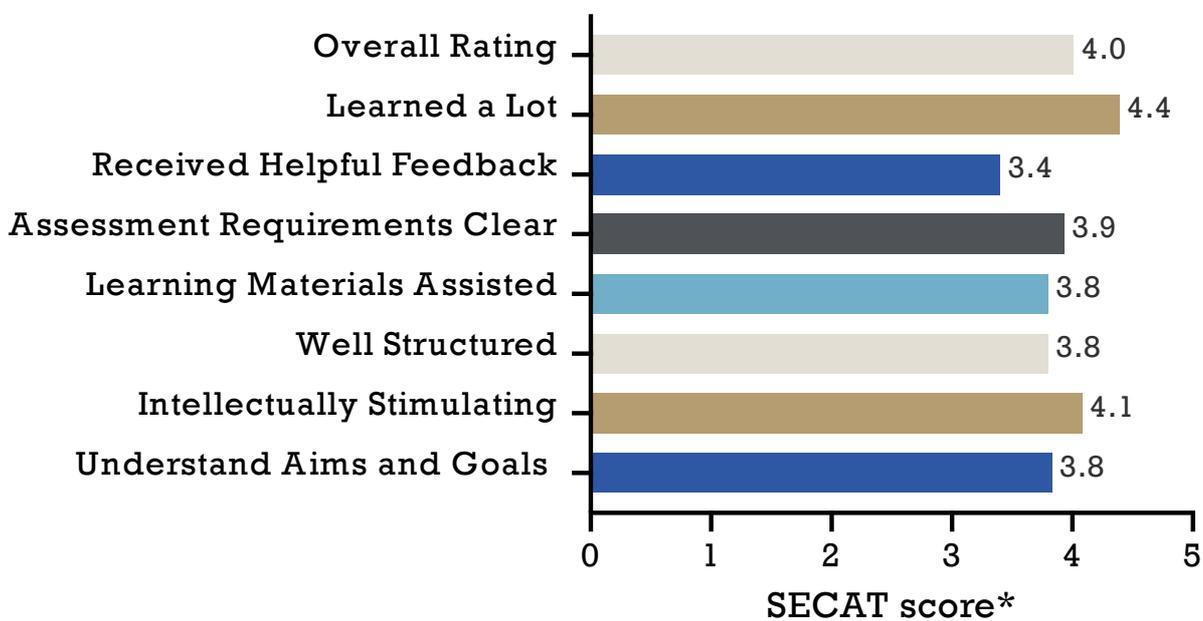
1 Contact

our lecturers, so sometimes, having them for only three lectures was a bonus!

TIPS AND TRICKS

- If you're going to do this course, you need to stay on top of the work as a lot of the detail is assessable.
- The textbook is not really that necessary.
- Try and get yourself a good journal club partner, and set aside quite a bit of time as it can be quite stressful to prepare a presentation a week.
- The practice exams provide quite a good idea of what the lecturers might ask in the midsem/final.
- Watch timing in the exams.

SECAT RESULTS



*2018 only, 2019/2020 unavailable

NEUR3002

The Integrated Brain

Lectures & seminars illustrating how brain systems work in an integrated fashion to extract high level sensory information, plan & control movement, form memories, cope with emotional & physical stress, & adapt to drugs of addiction.

[Original UQ Description](#)

ADVANTAGES

- Decent amount of overlapping content with BIOM2402 (1 module) and BIOM2012 (2 modules – the lecturers were the same).
- Covers many different topics, so you can probably find at least one you're interested in.
- Builds on some basic PSYC1020/NEUR1020 knowledge.
- Journal club provided an opportunity to engage with papers in more current research compared to second year subjects where you're looking at papers from the sixties. Most presentations were well-done and enjoyable to watch.

DISADVANTAGES

- Lack of structure and feeling of cohesiveness in the course across the modules.
- The content for some of the modules was a bit dry and presented in a less-than-engaging manner by some lecturers.
- Course coordinator is often unresponsive by email.
- Low-yield. (This could be construed as an advantage if you're looking for a bludge course – this probably has the least content of any third-year course.) The content varies between two extremes: the lecturer somehow managing to spend two hours on very basic concepts that could be summarised in a few dot points, or spending 3 minutes providing a half-hearted, mostly incomprehensible explanation of

GENERAL INFORMATION

Offerings

Semester 2

Modes available

External

Prerequisites

BIOM2011

Recommended

BIOL2200

AND

BIOM2012

Class Contact Hrs

3 Lecture

1 Tutorial

concepts that are extremely technical, specific and/or theoretical (luckily, nearly all of this latter type of content is not tested). So overall, not a very fulfilling experience.

- It can be stressful to figure out which content is too technical/specific to be assessed.
- Some of the MCQs make no sense because their wording is so bizarre.
- Content not even covered in lectures was tested (3 marks of one SAQ on the final).
- Journal club marking was a bit unreliable. It was not really clear how to get a high mark.

TIPS AND TRICKS

- Do not waste time memorising details of the more experimental/technical lectures. Or the details in general. (Unless they're emphasised, like the experiments in the Injured Brain module, or the drugs in the Moody Brain module, as explained below.) Be smart about how you study and pick out the important concepts. Try asking the lecturers if something will be assessed and pray that they respond.
- The exam questions are highly reflective of how distinct the modules are in the type of content that they focus on. The key to efficiency in studying for this course is to suss out what the different vibe is for each module/lecturer. Examples:
 - Injured Brain: Highly focussed on research methods and findings, and the relevant questions on the exam asked for details on how exactly one would design a particular experiment (that was covered in lectures).
 - Moody Brain: BIOM2402 2.0. Questions asked for the effects and mechanism of action of a particular drug.
- For Peter Noakes module (Immune Brain), and Jana Vukovic's module (Injured Brain), it can be particularly useful to draw a flowchart and some diagrams out during revision.
- Read ahead for the Stressed Brain lectures as the information is presented quite slowly.
- Make sure to stay on top of journal club, as it can be a lot of work if left to the night beforehand. Jana Vukovic's journal club was run very well, since she was good at answering any questions that cropped up. Reading and discussing the research papers each week contributed to a better understanding of her module, and also of any topics that overlapped with the contents of the papers. Hence, make sure to put an effort into journal club and pay attention to the presentations done by your peers.

SECAT RESULTS

