

Medical Biochemistry, BCHM 462/BIOL 462

Steven Giesege, West Building Room 754, Phone 369 5599

Vanessa Morris, Von Haast, Room 422, Phone 369 0532

Whakamahuki | Course Description:

This course will study in detail selected aspects of medical biochemistry. Participants are encouraged to develop their public speaking and debating skills during the course. Many of the seminars will be run in the style of a laboratory “journal club” with an emphasis on coffee/tea drinking.

Hua Ako | Course Learning Outcomes:

- Demonstrate a sophisticated understanding and evaluation of experimental design, methodology and data in the field of medical biochemistry. (assessment tasks: internal assessment)
- A sense of how researchers use biochemical techniques to contribute to advancement in the diagnosis and treatment of medical conditions. (assessment tasks: internal assessment)
- A sense of the importance and limitations of scientific and technical questions in addressing the broader issues of social concern. (assessment task: test)
- The ability to access and critically assess the scientific literature based on biochemical techniques. (assessment task: internal assessment & test)
- Developing and trialling your own “teaching to learn” techniques. (task: seminar)

Transferable Skills, Graduate Attributes and Kaupapa

- Ability to find relevant literature using online databases and develop visual display presentations of the publication. (EIE 4)
- Ability to summarise complex ideas and description of research into key ideas and concepts (EIE 3.).
- Ability to critically assess competing hypothesis and publication. (EIE 3)
- Ability to manage team work. Most jobs require interactions with others to accomplish a task to a particular standard and on time. (EIE 1)
- Greater competence in evaluation and design of techniques relevant to medical biochemistry (EIE 3.)
- Engage in science and technology issues with a broader understanding of their social context (BICC 1, GA1, GA2)

Seminar Time and Place

The seminars are one to two hours long. Check Timetable for location.

Seminar Conveners

A/Prof Steven Giesege, School of Biological Sciences, West Building Room 754, Phone 369 5599

Dr Vanessa Morris, School of Biological Sciences, Von Haast, Room 635, Phone 369 0532

Reading list of papers

You are expected to find on the web and down load pdf of the papers listed for each seminars reading. These papers will be discussed in depth at the seminars.

Proposed Seminar Topics for 2024

Please check time table for confirmation of times, date and location.

	Date	Topic and Convener
Seminar 1	Tuesday 12 – 1 pm	Introduction to Atherosclerosis A/Prof Giesege, (1 Hour)
Seminar 2	Tuesday 9 - 11 am	Atherosclerosis Introduction to Cholesterol Crystals A/Prof Giesege, (2 Hour)
Seminar 3	Tuesday 9 - 11 am	Cholesterol Crystals and Introduction to PCSK9 A/Prof Giesege, (2 hr)
Seminar 4	Tuesday 9 - 11 am	PCSK9 and inflammation and Introduction to Alzheimer's disease Giesege and Morris , (2 hr)
Seminar 5	Tuesday 9 - 11 am	Presentation of Student Study plans, (2 hr) Giesege and Morris,
Seminar 6	Tuesday 9 - 11 am	Introduction to Alzheimer's disease Dr Vanessa Morris, (2 hr)
Seminar 7	Tuesday 9 - 11 am	Alzheimer's disease presentations Dr Vanessa Morris, (2 hr)

Aromatawai | Assessment

The final grade will be made up by the following;

20% **Written Summaries**

For each seminar session, each student will write a 1 page summary of the research paper they have studied which will be handed in on the day of the seminar to the lecturer unless a medical certificate is provided. These will copied and placed on learn for the rest of the class to aid as study notes. They will then be marked and returned.

20% **Lesson Plan**

Each student will develop their own lesson plan and seminar around a chosen topic in medical science. They will submit this topic summary, papers and review as well as give a short presentation on the subject (see details below).

60% **Final examination in the fourth term**

This is a 2.5 hour exam consisting of an either/or question from A/Prof Giesege and an either/or question from Dr Morris.

To pass a questions well, the examiners are looking for candidates to have written approximately 4 to 5 pages of factual information and discussion excluding diagrams.

Lesson Plan Assignment

Students will submit a lesson plan for a topic they have selected. The document is made up off

- 2 page introduction to topic.
- 5 papers plus a review paper on a topic
- 500 word description on the relevance of the selected papers
- Set 5 to 8 questions from the papers plus give 5-10 line answers
- 5 minute Oral presentation with 5-6 slides introducing the topic.

RULES, REGULATIONS, AND WHAT TO DO WHEN THINGS GO WRONG

[updated March 2023]

If in doubt: ASK! The course coordinator is happy to answer questions. All staff involved in the course are available for advice on specific issues.

What do I do if I have to miss a test/exam or if my performance was impaired?

In Biological Sciences, we require a satisfactory level of achievement in both the theoretical aspects of the discipline and in practical activities. **This means you must attend all class activities (labs, tutorials, fieldtrips)** and submit all items of assessment unless you have a very good reason not to (e.g. medical reasons) and if this has been approved by your course coordinator.

If you feel that **illness, injury, bereavement, or other extenuating circumstances beyond your control** prevented you from completing a **test/exam** worth 10% or more of the total course assessment, or if these circumstances affected your performance in such assessments, you should apply for Special Consideration. Applications for Special Consideration should be submitted via the Special Consideration website <http://www.canterbury.ac.nz/study/special-consideration/> within five working days of the assessment or its due date. You should also notify the course coordinator. If you apply for Special Consideration because of medical reasons, you should visit a doctor within a reasonable timeframe (application form available on the website above or from the Student Health Centre).

The Special Consideration provisions are intended to assist students who have covered the work of a course but have been prevented by illness or other critical circumstances from demonstrating their mastery of the material or skills at the time of a test/exam – **they do not excuse you from doing the test/exam** within a reasonable time agreed with the course coordinator.

What do I do if I have to miss a quiz or assignment or if I need an extension?

You cannot apply for Special Consideration if you miss an assessment that is not a test/exam, such as a quiz, lab report, essay, literature review or other assignment, or if the test/exam is worth less than 10% or more of the total course assessment. If this happens or if you need an extension because of **illness, injury, bereavement, or other extenuating circumstances beyond your control**, please contact the course coordinator and arrange an alternate activity and/or submission date. You should also do this if you have to miss a laboratory, tutorial or field trip.

What are other valid reasons to miss an assessment or mandatory course activity?

The Special Considerations policy (<https://www.canterbury.ac.nz/about/governance/ucpolicy/student/special-consideration-procedures-and-guidelines/>) outlines only a few kinds of activities that UC considers valid reasons for missing an assessment or mandatory course activity other than those outlined above. These include **involvement in international or national representative sport or cultural groups**. Holiday trips, birthday parties, weddings, work-related commitments etc. are not given special status in this University policy. Please contact your course coordinator to ask for an alternate activity and/or submission date if you are eligible.

Special Consideration for late discontinuation of a course

Students prevented by **extenuating circumstances** from completing the course after the final date for withdrawing, may apply for Special Consideration for late discontinuation of the course. Applications must be submitted via <http://www.canterbury.ac.nz/study/special-consideration/> no later than five working days after the examination period has finished.

Academic Integrity

It is the responsibility of each student to be familiar with the definitions, policies and procedures concerning academic misconduct/dishonest behaviour. Instances of academic misconduct will be dealt with in a serious and appropriate manner. Students should refer to: <https://www.canterbury.ac.nz/about/ako/academic-quality/academic-integrity/>

Plagiarism

It is essential that you are aware that plagiarism is considered a very serious offence by the academic community, the University and the School of Biological Sciences. Plagiarism is defined as taking content from another work or author and presenting it, without attribution, as if it is your own work. Content here includes text (sentences or major parts of sentences), display items (graphs and tables), and overall structure (the detailed sequence of ideas). Plagiarism includes:

- re-use of previous assignments (even if each individual sentence has been rephrased to say the same thing in different words, if the overall structure is re-used).
- copying of another student's work (with or without their consent).
- the unreferenced use of published material or material from the internet, e.g. cutting and pasting of paragraphs or pages into an essay.

- the generation of text using artificial intelligence technology without disclosure and when it is not intended to be part of an assignment.

For most pieces of in-term assessment you will be given information concerning the use of direct and indirect quotes from previously published work. If you have any doubt about the appropriate use of published material, please speak with an academic staff member. If you are unsure what plagiarism is, seek advice.

It is a School policy that courses will likely that you submit work electronically for subsequent analysis of originality using *Turnitin*. Students agree that by taking courses in BIOL, assessments may be submitted to Turnitin.com for textual similarity review. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Terms and Conditions of Use as posted on the Turnitin.com site.

Where do I hand in assignments and then collect them once marked?

All assignments should be submitted as directed by the course coordinator. Typically, this will be electronically via Learn for on-line grading and for analysis in *Turnitin*. If a hard copy is requested, assignments should be placed in the designated collection boxes in the foyer of the 2nd floor of the School of Biological Sciences (Julius von Haast building, at the top of the stairs). All assignments must be accompanied by a cover sheet signed by you stating that the submitted work is not plagiarised. Cover sheets are available on top of the collection boxes, or you can download one from the Biology website (<http://www.canterbury.ac.nz/media/documents/science-documents/assignment-coversheet.pdf>).

Marked assignments will be returned through Learn or, if in hard copy, can be collected from the School of Biological Sciences reception, unless directed otherwise by the course coordinator. Teaching staff will endeavour to return work as soon as possible, and should contact you if there are likely to be any delays that will prevent return within the maximum 4-week timeframe.

What if I can't get it finished in time?

Reports and assignments should be handed in on time. Extensions may be granted if you have a valid reason (see above). **If you require an extension, you should request one from the course coordinator** (or the lecturer responsible for marking the work), with as much notice as possible. Please do this BEFORE the deadline for the assignment. **If you have been given an extension and you have been asked to submit a hard-copy of your work, you should hand the work DIRECTLY to the course coordinator** (do not put it in the drop box as it may not be cleared after the due date).

If an extension has not been granted:

- work handed in within 1 hour of the deadline: penalty of up to 5 percentage points of the mark for the assignment (e.g., a mark of 75% might be reduced to 70%).
- work handed in 1 – 24 hours after the deadline: penalty of 10 percentage points of the mark for the assignment (e.g., a mark of 75% is reduced to 65%).
- work handed in 1 – 7 days after the deadline: penalty of 15 percentage points of the mark for the assignment (e.g., a mark of 75% is reduced to 60%).
- work handed in more than 7 days after the deadline will not be marked or earn credit.

What if I have written more than the word or page limit?

If there is a word limit on an assignment, it is usually there to stop you doing too much work and to encourage you to write succinctly. You can be up to 10% over without too much worry, but if the length increases beyond that your mark may suffer due to failure to follow the requirements. If you find yourself way over the word limit talk to the lecturer concerned about how to get your assignment to an acceptable length. Unless specifically advised that there is flexibility, you must adhere to the word limit indicated.

What if I fail part of the course?

In Biological Sciences, we require a satisfactory level of achievement in both the theoretical aspects of the discipline and in practical activities. This means you must attend all class activities and submit all items of assessment unless you have a very good reason not to (e.g. medical reasons). **A student must attain an average score of at least 40% for in-course assessments (e.g. assignments, reports, quizzes) and an average score of at least 40% in the exam and/or tests, AND score at least 50% overall for the course, to be awarded a passing grade. See the course outlines for clarification of the assessment items included in each category and ask the coordinator if you are still unsure.**

What's the best way to give feedback?

We welcome constructive feedback at all times – help us to make this a valuable course for you. We endeavour to remain approachable at all times. If you would rather give feedback anonymously, please use the online course survey or talk to lab demonstrators, or your class rep (who will all report back to the staff-student liaison committee that includes a representative from each of the undergraduate classes). Class representatives will be selected from each class at the start of course.

What's the best way to complain?

If you feel you have not been fairly treated during this course, please raise the issue with the lecturer or course coordinator in the first instance. Other avenues include your class rep., who can raise issues anonymously, or the UCSA education coordinator.

Grading

A+	90% or above
A	85 – 90
A-	80 – 84
B+	75 – 79
B	70 – 74
B-	65 – 69
C+	60 – 64
C	55 – 59
C-	50 – 54

A restricted pass (R) **may** be awarded to those who are close to a pass (i.e. an overall score of 48-49.9%) AND who have achieved at least a 40% overall score in both in-course assessment and tests/exams. If an R grade is awarded you gain credit for the course but **cannot continue into papers that require this course as a pre-requisite**. NB. The R grade is only available at 100 and 200 level - it cannot be awarded for third year papers.

Failing grades: D 40-49 E 0–39