FACULTY OF SCIENCE
SCHOOL OF BIOTECHNOLOGY AND BIOMOLECULAR SCIENCES

BIOC3261
HUMAN BIOCHEMISTRY

SESSION 2, 2017
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Faculty of Science – BIOC3261 Human Biochemistry Course Outline

1. Information about the Course

NB: Some of this information is available on the UNSW Handbook

<table>
<thead>
<tr>
<th>Component</th>
<th>HPW</th>
<th>Time</th>
<th>Day</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures</td>
<td>2</td>
<td>5 - 6 pm</td>
<td>Monday</td>
<td>CLB 3</td>
</tr>
<tr>
<td>Lecture 1</td>
<td></td>
<td>9 - 10 pm</td>
<td>Wednesday</td>
<td>CLB 4</td>
</tr>
<tr>
<td>Laboratory/ Other activity</td>
<td>3</td>
<td>2 - 5 pm</td>
<td>Monday</td>
<td>Mathews 104</td>
</tr>
<tr>
<td>Lab – Option 1</td>
<td></td>
<td>10 - 1 pm</td>
<td>Friday</td>
<td>Wallace Wurth 123</td>
</tr>
<tr>
<td>Lab – Option 2</td>
<td></td>
<td></td>
<td></td>
<td>Mathews 309</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5</td>
<td></td>
<td></td>
<td>Wallace Wurth 123</td>
</tr>
</tbody>
</table>

Special Details

Any students with special requirements resulting from a disability should consult the course convener by Week 2 of Session 2 so that appropriate resources can be provided.

2. Staff Involved in the Course

<table>
<thead>
<tr>
<th>Staff</th>
<th>Role</th>
<th>Name</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Convenor</td>
<td></td>
<td>Dr. Nirmani Wijenayake</td>
<td><a href="mailto:b.wijenayakeg@unsw.edu.au">b.wijenayakeg@unsw.edu.au</a></td>
</tr>
<tr>
<td>Course Co-convener</td>
<td></td>
<td>Prof. Andrew J. Brown</td>
<td></td>
</tr>
<tr>
<td>Additional Teaching Staff</td>
<td>Lecturers</td>
<td>Dr. Ross Laybutt</td>
<td><a href="mailto:r.laybutt@garvan.org.au">r.laybutt@garvan.org.au</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr. Kyle Hoehn</td>
<td><a href="mailto:k.hoehn@unsw.edu.au">k.hoehn@unsw.edu.au</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr. Jerry Greenfield</td>
<td><a href="mailto:j.greenfield@garvan.org.au">j.greenfield@garvan.org.au</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr. Kate Quinlan</td>
<td><a href="mailto:kate.quinlan@unsw.edu.au">kate.quinlan@unsw.edu.au</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prof. H. Rob Yang</td>
<td><a href="mailto:H.Rob.Yang@unsw.edu.au">H.Rob.Yang@unsw.edu.au</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr. Vladimir Sytnyk</td>
<td><a href="mailto:v.sytnyk@unsw.edu.au">v.sytnyk@unsw.edu.au</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr. Michal Janitz</td>
<td><a href="mailto:m.janitz@unsw.edu.au">m.janitz@unsw.edu.au</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dr. Irina Voineagu</td>
<td><a href="mailto:i.voineagu@unsw.edu.au">i.voineagu@unsw.edu.au</a></td>
</tr>
</tbody>
</table>

1 UNSW Online Handbook: http://www.handbook.unsw.edu.au
3. Course Details

<table>
<thead>
<tr>
<th>Course Description</th>
<th>This course showcases some more advanced aspects of biochemistry that are particularly relevant to humans. Specialist lectures are given by experts in the area. These include lectures on diabetes by a leading team from the Garvan Research Institute, and lectures on neurobiology, lipid metabolism, and the biochemistry of athletic performance by experts with diverse international research experience in their respective fields.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Aims</td>
<td>The aim is to provide students with a background of normal metabolism as well as exposure to changes that occur in selected pathological states. Components of the course address specific clinical problems, such as heart disease, diabetes, cancer and neurological conditions. This course delivers content by leading scientists who can convey their enthusiasm and passion for their subject area. Many of the lectures discuss the process whereby our knowledge on a particular topic was gained and present cutting-edge research.</td>
</tr>
</tbody>
</table>
| Student Learning Outcomes | By the end of this course, you will:  
• have a detailed understanding of several current areas in human biochemistry, and be armed with the tools required to go about exploring other areas of research.  
• be able to evaluate scientific evidence and literature.  
• be able to critically evaluate clinical biochemical measures like glucose and cholesterol. |

Graduate Attributes Developed in this Course

| Science Graduate Attributes | Select the level of FOCUS  
0 = NO FOCUS  
1 = MINIMAL  
2 = MINOR  
3 = MAJOR | Activities / Assessment |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Research, inquiry and analytical thinking abilities</td>
<td>3</td>
</tr>
<tr>
<td>Capability and motivation for intellectual development</td>
<td>2</td>
</tr>
<tr>
<td>Ethical, social and professional understanding</td>
<td>1</td>
</tr>
<tr>
<td>Communication</td>
<td>3</td>
</tr>
<tr>
<td>Teamwork, collaborative and management skills</td>
<td>3</td>
</tr>
<tr>
<td>Information literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

| Major Topics (Syllabus Outline) | A FRESH LOOK AT WEIGHT LOSS  
Ruben Meerman (1 lecture)  
Obesity is preventable and can be treated without drugs or side effects but a growing trans-disciplinary movement called ‘Health At Every Size’ is challenging these well-established facts. Adherents claim that diets don’t work and are calling for a ‘paradigm shift’ to abandon weight loss objectives altogether and to concentrate on “weight neutral” health outcomes instead. This lecture puts weight gain and weight loss under the molecular microscope and provides a fresh biochemical perspective on the global overweight/obesity epidemic, its causes and potential cures. |
| --- | --- |
| CHOLESTEROL  
Prof. Andrew J. Brown (BABS) (4 lectures)  
The overall objective of these lectures is to describe the several roles that cholesterol has in health and disease. Topics will include:  
1. General membrane functions of cholesterol; the evolutionary perfection of cholesterol; the role of cholesterol in the hedgehog signalling pathway in embryonic development.  
2. Absorption of dietary cholesterol and transport in the circulation by lipoproteins; cellular cholesterol homeostasis and how the statin class of blood cholesterol lowering drugs work.  
3. The SREBP pathway as master transcriptional regulators of cholesterol homeostasis.  
4. Cholesterol and heart disease; HDL and Reverse Cholesterol Transport; cholesterol accumulation in macrophage-foam cells in atherosclerosis; the role of ABCA1 and nuclear receptors (LXR/RXR) in unloading cholesterol from macrophage-foam cells.  
5. The final lecture will cover new research from Prof. Brown's lab which delves deeper into cellular cholesterol homeostasis and brings concepts from the previous lectures together. |
| LIPID METABOLISM IN HEALTHY BRAIN AND NEUROLOGICAL DISEASES  
Dr. Irina Voineagu (BABS) (1 lecture)  
This lecture will cover lipid metabolism as it relates to normal brain physiology and brain pathology. The importance of lipids in human biochemistry is nowhere more apparent than in the brain, which is a lipid rich organ, and a large number of neurological conditions are attributed to altered lipid metabolism - often genetically encoded. In the lecture I will:  
1. Discuss the basic biochemistry of brain lipids including lipid mediators of neuroinflammation.  
2. Discuss the biochemistry and properties of myelin.  
3. Give an overview of brain disorders resulting from altered lipid metabolism. |
| ADHESION & CELL COMMUNICATION IN NEUROLOGICAL CONDITIONS  
Dr. Vladimir Sytnyk (BABS) (1 lecture)  
Adhesion and cell communication in neurological conditions  
The lecture would include:  
1. A very brief introduction to the basics of brain organization (major cell types, structures).  
2. Types of the cellular interactions in the brain.  
3. Protein organization of synapses as a basic subcellular compartment involved in the information processing and storage in the brain, with some emphasis on the role of adhesion molecules.  
4. Link between abnormalities in the cell adhesion molecule expression and synapse function in neurological conditions (Down syndrome, Alzheimer’s disease and schizophrenia).  
5. Mouse models to study neurological conditions. |
TRANSCRIPTOME REGULATION IN NEURODEGENERATIVE DISEASES
Dr. Michal Janitz (BABS) (1 lecture)
The term transcriptome refers to the total number of mRNA molecules expressed in a particular cell type, tissue or an organism. The concept of transcriptome emerged as a result of studies of gene expression on the genome-wide level using modern techniques of molecular biology such as DNA microarrays, high-throughput RNA interference and, very recently, next-generation DNA sequencing. In higher vertebrates, including human, there are several common functional and structural features of the transcriptome which allow the genes to be expressed in tightly coordinated manner during development and adult life. Furthermore, changes in transcriptome profile may also indicate the onset of the disease and might be observed long before any clinical symptoms emerge. In particular, molecular pathology of neurodegenerative diseases, such as Alzheimer’s disease, is currently considered to be a result of aberrations in transcription regulation rather than mutations in genomic sequence. The lecture will address regulation of gene expression, the role of transcriptional factors, structure of promoter regions and coordination of transcription on the level of the whole genome in the context of molecular pathophysiology of the human brain.

OBESITY & LIPOTOXICITY
Prof. H. Rob Yang (BABS) (2 lectures)
Lipotoxicity refers to fatty acids-induced cell toxicity. In the obesity epidemic, lipotoxicity is one of the major factors that underlie devastating human diseases such as diabetes. In this lecture, I will first discuss that synthesis of storage neutral lipids (fat). I will then discuss the genetics of obesity, and how obesity may lead to lipotoxicity which causes impaired insulin signalling, beta cell death and type II diabetes.

DIABETES AND INSULIN/CARBOHYDRATE BIOCHEMISTRY
Dr. Ross Laybutt (Garvan), Dr. Kyle Hoehn (BABS) and Dr. Jerry Greenfield (Garvan) (5 lectures)
Diabetes is really a multitude of diseases. In broad terms it can be broken down into Type 1 and Type 2 diabetes. Type 1 or Juvenile onset diabetes results from the autoimmune destruction of the pancreatic beta cells and is characterised by a lack of circulating insulin.
Children with this disease are treated with insulin injections. Type 2 diabetes is characterized both by insulin resistance as well as pancreatic insufficiency. Type 2 diabetes is often associated with obesity and this is thought to be one of the major reasons that the incidence of Type 2 diabetes is increasing dramatically. Type 2 diabetes is most often treated with diet and exercise.
The lectures will cover:
1. The major pathophysiological features of Type 1 and Type 2 diabetes.
2. The clinical management of these diseases.
3. The cellular contribution to whole body glucose metabolism.
4. The molecular control of insulin action in peripheral tissues (muscle, liver and fat).
5. Insulin signal transduction pathways.
6. Major metabolic pathways regulated by insulin.
7. Molecular control of insulin secretion.
8. The cell biology of insulin biosynthesis and its regulated secretion.
THE BIOCHEMISTRY OF ATHLETIC PERFORMANCE
Dr. Kate Quinlan (BABS) (3 lectures)
The objective of this lecture series is to discuss how biochemistry and metabolism change during and in response to exercise in humans. Topics will include:
1. an introduction into the biology of skeletal muscle.
2. the differences in contractile properties and metabolism of the different types of human skeletal muscle fibres.
3. how the body mobilises fuel stores and how skeletal muscle metabolises these fuels to generate energy for muscle contraction during exercise.
4. how the human body adapts to exercise training with a focus on muscle Adaptations.
5. how a polymorphism in the ACTN3 gene contributes to human athletic performance through altering muscle biology and muscle metabolism.

Relationship to Other Courses within the Program
This course builds on and greatly extends 2nd year biochemistry, giving insights into other levels of regulation of metabolism and other biochemical processes, often from a transcriptional and cell biological viewpoint. It therefore impinges upon a number of courses (e.g. biochemistry, molecular biology, proteins and cell biology).

4. Rationale and Strategies Underpinning the Course

Teaching Strategies
The lectures feature recent developments in aspects of human health and disease, particularly in areas of major metabolic disease. These have a major lifestyle component and the Dietary Analysis and Nutrition Symposia feed directly into better understanding of metabolic diseases, as does the Wetlab which gives the students the opportunity to measure their own glucose and cholesterol levels. The self-directed learning tasks (e.g. the project) are geared towards encouraging the students to discover their own interesting examples of recent research relating to human biochemistry, and/or to develop technical skills important in modern biochemistry/molecular cell biology.

Rationale for learning and teaching in this course
A 3rd year subject should be an opportunity for students to hopefully rediscover (if it was ever lost) their own enthusiasm and passion for science, and so this course offers a number of self-directed learning tasks that students can choose for themselves.

It is crucial that by the end of 3rd year, students are thinking like scientists – notably, that they can critically evaluate the evidence. For instance, in this course, we hold a Nutrition Symposium where students present critiques of methods for weight loss that are advertised and promoted via websites, but which do not work as claim. These are lively sessions where the students challenge each other's assumptions and learn what constitutes good evidence (e.g. peer-reviewed articles in good scientific journals) and what constitutes bad evidence (e.g. websites with something to sell). It is also important for the students to realise that our understanding of biological processes is constantly evolving by presenting them with samples of the latest research.

Key to the lecture schedule on the following page:
NWG, Dr Nirmani Wijenayake, BABS; RM, Ruben Meerman; AJB, Prof Andrew Brown, BABS; JG, Prof Jerry Greenfield, Garvan Institute of Medical Research; RL, Dr Ross Laybutt, Garvan Institute of Medical Research; KH, A/Prof Kyle Hoehn, BABS; KQ, Dr Kate Quinlan, BABS; VS, Dr Vladimir Sytnyk, BABS; MJ, Dr Michal Janitz, BABS; IV, Dr Irina Voineagu, BABS; HRY, Prof H. Rob Yang, BABS;
### 5. Course Schedule

Some of this information is available on the [Online Handbook](http://www.handbook.unsw.edu.au) and the [UNSW Timetable](http://www.timetable.unsw.edu.au/).

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Topics &amp; Lecturers</th>
<th>Practical (Monday or Friday)</th>
<th>Other Activities (to be worked on in own time &amp; space)</th>
</tr>
</thead>
</table>
| 2 (July 31) | **MON:** Introduction (NWG)  
**WED:** Weight Loss (RM) | | BFM lesson |
| 3 (Aug 7) | **MON:** Cholesterol (AJB + LP)  
**WED:** Cholesterol (AJB) | | BFM lesson |
| 4 (Aug 14) | **MON:** Cholesterol (AJB)  
**WED:** Cholesterol (AJB) | Nutrition Symposium 1  
(Mathews 104 or 309) | |
| 5 (Aug 21) | **MON:** Neurobiology (IV)  
**WED:** Neurobiology (VS) | Nutrition Symposium 2  
(Mathews 104 or 309) | |
| 6 (Aug 28) | **MON:** Neurobiology (MJ)  
**WED:** Obesity (HRY) | | Assigned Project |
| 7 (Sept 4) | **MON:** Lipotoxicity (HRY)  
**WED:** MID-SESSION TEST | Urinalysis Practical  
(Wallace Wurth 123) | Assigned Project |
| 8 (Sept 11) | **MON:** Diabetes (KH)  
**WED:** Diabetes (KH) | Blood Cholesterol Practical  
(Wallace Wurth 123) | Assigned Project |
| 9 (Sept 18) | **MON:** Diabetes (KH)  
**WED:** Diabetes (JG) | | Assigned Project |
| MID SESSION BREAK | | | |
| 10 (Oct 2) | **MON:** PUBLIC HOLIDAY  
**WED:** Diabetes (RL) | | Assigned Project |
| 11 (Oct 9) | **MON:** Athletic Perform. (KQ)  
**WED:** Athletic Perform. (KQ) | | Assigned Project |
| 12 (Oct 16) | **MON:** Athletic Perform. (KQ)  
**WED:** Student Lecture | | |
| 13 (Oct 23) | **MON:** Student Lecture  
**WED:** Student Lecture | | |

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4 UNSW Timetable: [http://www.timetable.unsw.edu.au/](http://www.timetable.unsw.edu.au/)
## 6. Assessment Tasks and Feedback

<table>
<thead>
<tr>
<th>Task</th>
<th>When</th>
<th>Brief Description</th>
<th>% of total mark</th>
<th>Date of Submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFM lessons</td>
<td>Week 2-3</td>
<td>These online lessons are based on the book, <em>Big Fat Myths</em>, by Ruben Meerman. These lessons will give you a better understanding of nutrition and weight loss. Students need to complete the 3 lessons to a satisfactory standard.</td>
<td>5</td>
<td>Due at the end of each week</td>
</tr>
<tr>
<td>Nutrition Symposia</td>
<td>Week 4-5</td>
<td>We have a mock symposium in which students present a 12 minute talk (+3 min for questions) or a poster on some aspect of weight loss treatment or dietary supplements.</td>
<td>15</td>
<td>See detailed instructions below in The Nutrition Symposia description</td>
</tr>
<tr>
<td>Mid-session test</td>
<td>Wed 6th of September</td>
<td>Will cover all the lectures given before week 8.</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Week 6-11</td>
<td>The students will choose a medical breakthrough to make a website (work in teams of 2). Three teams of 3 students will be able to give a lecture in weeks 12 and 13 and some students will be able to write an essay on a set topic.</td>
<td>20</td>
<td>See detailed instructions below in the Project description</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Exam period</td>
<td>Will cover all the lectures given after week 7 and practical material</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>


7. Additional Resources and Support

<table>
<thead>
<tr>
<th>Text Books</th>
<th>Many of the concepts covered in the course are from very recent research which has yet to make its way into text books. Therefore, there is no textbook set for this course. However, students may find their second year Biochemistry/Molecular Biology texts useful to recap general principles. Details of additional materials should be provided by individual lecturers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Manual</td>
<td>Soft copy of the manual will be posted on Moodle.</td>
</tr>
</tbody>
</table>

8. Required Equipment, Training and Enabling Skills

<table>
<thead>
<tr>
<th>Equipment Required</th>
<th>Personal protection equipment (PPE) such as safety glasses, fully closed shoes, and lab coats will be required for the wet lab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling Skills Training Required to Complete this Course</td>
<td>It is expected that all students will have had basic H&amp;S training before the wet lab.</td>
</tr>
</tbody>
</table>
9. Course Evaluation and Development

Student feedback is gathered periodically by various means. Such feedback is considered carefully with a view to acting on it constructively wherever possible. This course outline conveys how feedback has helped to shape and develop this course.

<table>
<thead>
<tr>
<th>Mechanisms of Review</th>
<th>Last Review Date</th>
<th>Comments or Changes Resulting from Reviews</th>
</tr>
</thead>
</table>
| Major Course Review  | June 2017        | Each year, student evaluative feedback on the course is gathered, using among other means, UNSW's myExperience Process. Student feedback is taken seriously, and continual improvements are made to the course based in part on such feedback. Significant changes to the course will be communicated to subsequent cohorts of students taking the course. In response to student comments and suggestions, we have implemented the following in 2017:  
  - The wet labs are now spread over two weeks and earlier in the semester to align better with lectures.  
  - The total number of assessments reduced.  
  - The marking criteria and assessment guidelines for each assessment is revised and broadened.  
  - New online lessons added to improve the understanding of a globally relevant topic – nutrition and weight loss. |

| myExperience         |                  | Comments on 2016’s course:  
  - “The lecture topics were all so interesting and relevant to our everyday life.”  
  - “I loved the flexibility of the assignments; having options meant I could develop skills in new areas and get the most out of each assignment.”  
  - “I liked having the lectures grouped together under a few topics, this made it easier to learn less topics but in a more rounded way. The symposium was a great way to have an early assessment and really encouraged me to think about nutrition and weight loss, and discuss it with other students. Good to hear about new research/health ideas!” |
## 10. Administration Matters

### Expectations of Students

Students are expected to be regular and punctual in attendance at all classes (lectures, practicals, mid-session test).

*Lecture attendance for this course will be regularly monitored.*

Many of the lecturers in this course are esteemed researchers and they are especially taking the time off their research to come and give you lectures. Therefore, it is common courtesy to show your appreciation by being present in the lectures.

*Attendance to the introductory lecture, lectures given by researchers from outside of UNSW, as well as student lectures will be monitored.*

### Assignment Submissions

**Lodgement**

All written work must be submitted online through Moodle unless otherwise specified by the course coordinator. If no time is specified; work must be lodged by 4:30 pm on the due date.

**Late Submission**

If your work is submitted after a specified submission deadline, the work may or may not be marked, at the discretion of the course coordinator. Similarly, there will be a 10% penalty per day, again at the discretion of the course coordinator. If medical grounds preclude submission of a report by the due date, contact should be made with the course authority as soon as possible. A medical certificate will be required for late submission on medical grounds and must be appropriate for extension period.

### Occupational Health and Safety*

Biochemical laboratories contain apparatus and chemicals that are potentially dangerous when misused or handled carelessly. Consequently, safe experimental procedures and responsible conduct in the laboratory are essential at all times. The regulations governing conduct in the laboratory have been set down by the NSW Occupational Health & Safety (Hazardous Substances) Regulation 1996, NSW Draft OHS Regulation 2000, and the NSW Workcover Publications and Worksafe National Codes of Practice and Guidance Notes. These policies apply to all university staff and students.

Students are responsible for:

- Complying with the requirements of this policy, legislation and Australian Standards.
- Following directions given to them by the person supervising their work.
- Co-operating in the performance of risk assessments.
- Participating in induction and training programs.

**ALL ACCIDENTS WITH CHEMICALS OR INJURIES MUST BE REPORTED IMMEDIATELY TO YOUR DEMONSTRATOR OR TO A MEMBER OF THE PREPARATION ROOM STAFF.**

### Assessment Procedures

These are detailed for each of the assignments later in this manual.

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*UNSW OHS Home page*
Students must regularly check Moodle announcements for further instructions on assessment details and submission processes.

### Equity and Diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course Convenor prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equity and Diversity Unit (9385 4734 or [http://www.studentequity.unsw.edu.au/](http://www.studentequity.unsw.edu.au/)).

Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

<table>
<thead>
<tr>
<th>Student Complaint Procedure⁶</th>
<th>School Contact</th>
<th>Faculty Contact</th>
<th>University Contact</th>
</tr>
</thead>
</table>
|                             | Dr Louise Lutze-Mann  
   Director of Teaching  
l.lutze-mann@unsw.edu.au | Dr Chris Tisdell  
   Associate Dean (Education)  
cct@maths.unsw.edu.au  
   Tel: 9385 7112  
or  
   Dr Gavin Edwards  
   Associate Dean  
   (Undergraduate Programs)  
g.edwards@unsw.edu.au  
   Tel: 9385 4652 | Student Conduct and  
   Appeals Officer  
   (SCAO) within the  
   Office of the Pro-Vice-  
   Chancellor (Students)  
   and Registrar.  
   Telephone 02 9385 8515, email  
   studentcomplaints@unsw.edu.au  
   
   University Counselling  
   and Psychological  
   Services⁷  
   Tel: 9385 5418 |

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⁶ UNSW Student Complaint Procedure  
⁷ University Counselling and Psychological Services
## 11. UNSW Academic Honesty and Plagiarism

### What is Plagiarism?

Plagiarism is the presentation of the thoughts or work of another as one’s own. Examples include:
- direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person’s assignment without appropriate acknowledgement;
- paraphrasing another person’s work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;
- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does not amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via:

[www.lc.unsw.edu.au/plagiarism](http://www.lc.unsw.edu.au/plagiarism)

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:
- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle
† Adapted with kind permission from the University of Melbourne
12. SPECIAL CONSIDERATION AND FURTHER ASSESSMENT SEMESTER 2, 2017

Students who believe that their performance, either during the session or in the end of session exams, may have been affected by illness or other circumstances may apply for special consideration. Applications can be made for compulsory class absences such as (laboratories and tutorials), in-session assessments tasks, and final examinations. Students must make a formal application for Special Consideration for the course/s affected as soon as practicable after the problem occurs and within three working days of the assessment to which it refers.

Students should consult the A-Z section of the Student Guide particularly the section on “Special Consideration”, for further information about general rules covering examinations, assessment, special consideration and other related matters. This information is published free in your UNSW Student Diary and is also available on the web at: https://student.unsw.edu.au/guide

HOW TO APPLY FOR SPECIAL CONSIDERATION

Applications must be made via Online Services in myUNSW. You must obtain and attach Third Party documentation before submitting the application. Failure to do so will result in the application being rejected. After applying online, students must also verify their supporting documentation by submitting to UNSW Student Central:

- Originals or certified copies of your supporting documentation (Student Central can certify your original documents), and/or
- A completed Professional Authority form (pdf - download here).

The supporting documentation must be submitted to Student Central for verification within three working days of the assessment or the period covered by the supporting documentation. Applications which are not verified will be rejected.

Students will be contacted via the online special consideration system as to the outcome of their application. Students will be notified via their official university email once an outcome has been recorded.

SUPPLEMENTARY EXAMINATIONS:

The University does not give deferred examinations. However, further assessment exams may be given to those students who were absent from the final exams through illness or misadventure. Special Consideration applications for final examinations and in-session tests will only be considered after the final examination period when lists of students sitting supplementary exams/tests for each course are determined at School Assessment Review Group Meetings. Students will be notified via the online special consideration system as to the outcome of their application. It is the responsibility of all students to regularly consult their official student email accounts and myUNSW in order to ascertain whether or not they have been granted further assessment.

For Semester 2, 2017, BABS Supplementary Exams will be held between 4th – 8th of December

Further assessment exams will be offered on this day ONLY and failure to sit for the appropriate exam may result in an overall failure for the course. Further assessment will NOT be offered on any alternative dates.