School of Medicine

MHSA200: Research Realities in Medical & Health Sciences

Subject Outline
Autumn, 2016
On-Campus
Wollongong

Subject Information
Credit Points: 6
Pre-requisite(s): MHSA100
Co-requisite(s): Nil
Restrictions: Bachelor of Medical & Health Sciences Advanced (Honours)
Contact Hours: 2 hr Seminar/Tutorial; Practicals negotiable between the student and research group leader

Subject Contacts
Subject Coordinator/Lecturer

<table>
<thead>
<tr>
<th>Name</th>
<th>A/PR Barbara Meyer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Building 41, Room 316</td>
</tr>
<tr>
<td>Telephone</td>
<td>61 2 4221 3459</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:barbara_meyer@uow.edu.au">barbara_meyer@uow.edu.au</a></td>
</tr>
<tr>
<td>Consultation mode and times: Email for appointment</td>
<td></td>
</tr>
</tbody>
</table>

Project Supervisor
It is the responsibility of the student to identify a suitable research supervisor and project to be undertaken as the core component of this subject. Students should contact the subject coordinator in the first instance for advice, and then consult various potential supervisors for an outline of projects that are on offer. Prospective students are encouraged to discuss possible projects with a range of potential supervisors before deciding on a project. A useful starting point is the school website which outlines the research interests of all members of academic staff. A project and supervisor must be agreed with the subject coordinator no later than the first week of the session in which the project is to be undertaken. Supervision of a project will depend in part on the availability of resources.

Student Support and Advice
For general enquiries please contact StudentHub 41:
Location: 41.138B
Telephone: 61 2 4221 3492
Email: smah-students@uow.edu.au
Student Consultation and Communication

University staff receive many emails each day. In order to enable them to respond to your emails appropriately and in a timely fashion, students are asked to observe basic requirements of professional communication:

Please ensure that you include your full name and student number and identify your practical class or tutorial group in your email so that staff know who they are communicating with and can follow-up personally where appropriate.

Consider what the communication is about
- Is your question addressed elsewhere (e.g. in the subject outline or, on the eLearning site)?
- Is it something that is better discussed in person or by telephone? This may be the case if your query requires a lengthy response or a dialogue in order to address. If so, see consultation times above and/or schedule an appointment.
- Are you addressing your request to the most appropriate person?

Specific email subject title to enable easy identification of issue
- Identify the subject code of the subject you are enquiring about (as staff may be involved in more than one subject) put this in the email subject heading. Add a brief, specific query reference after the subject code where appropriate.

Professional courtesy
- Address the staff member appropriately by name (and formal title if you do not yet know them).
- Use full words (avoid ‘text-speak’ abbreviations), correct grammar and correct spelling.
- Be respectful and courteous.
- Allow 3 – 4 working days for a response before following up. If the matter is legitimately urgent, you may wish to try telephoning the staff member (and leaving a voicemail message if necessary) or inquiring at the School Office.
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*Hardcopies of this document are considered uncontrolled please refer to UOW website or eLearning for the latest version

Section A: General Information

Subject Learning Outcomes

On completion of this subject, students should be able to:

1. Critically discuss and analyse research
2. Understand how to develop and test a research hypothesis
3. Understand the collection and interpretation of data
4. Understand the legal and ethical requirements of research
5. Effectively communicate research ideas through verbal and written methods

Subject Description

This subject is an extension of MHSA100 Current Issues in Medical and Health Sciences. It provides advanced students with an exciting opportunity to learn practical components of research in the broad field of Medical & Health Sciences. Students will gain theoretical and hands on experience in research methodologies within a broad range of research environments and learn how to apply these research methodologies to answer different research questions. Although the specific research environments that students will experience will vary from year to year, such research environments may include the Centre for Translational Neuroscience, Childhood Obesity Research Centre, Smart Foods Centre, Biomechanics Research Laboratory, Human Performance Laboratory and Metabolic Research Centre.

eLearning Space

This subject has materials and activities available via eLearning. To access eLearning you must have a UOW user account name and password, and be enrolled in the subject. eLearning is accessed via SOLS (student online services). Log on to SOLS and then click on the eLearning link in the menu column. For information regarding the eLearning spaces please use the following link:
http://uowblogs.com/moodlelab/files/2013/05/Moodle_StudentGuide-1petpo7.pdf

Lecture, Tutorial, Laboratory Times

All timetable information is subject to variation. Check latest timetabling information on the 'Current Student' webpage on UOW website or log into SOLS to view your personal timetable prior to attending classes. http://www.uow.edu.au/student/index.html

Timetable information can be accessed from http://www.uow.edu.au/student/timetables/info/index.html

Key University Dates can be accessed from http://www.uow.edu.au/student/dates/index.html

Readings, References and Materials

Textbooks

The following text(s) will need to be purchased by students enrolled in this class.

Nil

Prescribed Readings (includes eReadings)

The following texts are prescribed for this subject, but students are not expected to purchase these. They are available to students through the library on the subjects eLearning site.

Please note that this is not a complete list, as other eReadings will also become available

4. Position of the American Dietetic Association and Dietitians of Canada: Vegetarian diets. JADA 2003;103(6):748-765

Materials
Nil

Recommended Readings
The following references complement the prescribed readings and textbooks:

Nil

Recent Changes to this Subject
i. Nil

Ethical Objection to the Use of Animal and Animal Products
In order to achieve specific learning objectives, the use of animals, animal tissues, and or animal-derived products (such as sera) is inherent and unavoidable. Students with conscientious objections to this use should not enrol in this subject.

Students who intend to avoid a particular learning activity on the basis of conscientious objection should notify the subject coordinator in writing as soon as possible and not later than the end of Week 1 of the session. Students who do not participate in a particular learning activity are required to complete an alternative exercise (a CD-ROM is available) or attend the practical and “observe”. The material involved is examinable and the prac must be written up and completed in your workbook. For further information, refer to http://www.uow.edu.au/about/policy/UOW058708.html

Laboratory Safety Guidelines
The rules below are general rules that are required in laboratories.

- Before commencing your project you are to ensure that you understand specific procedures for the laboratory in which you work.
- You will need to fill out a risk assessment form before commencing any experiments (confer with your supervisor).
- Never use any equipment or attempt any experiment without checking the safety implications with your supervisor or experienced delegated laboratory worker.
- Undergraduate students are not permitted to work after hours unless there is appropriate approval and supervision.
## Schedule of Learning*

<table>
<thead>
<tr>
<th>Week</th>
<th>Week Commencing</th>
<th>Lecture</th>
<th>Tutorial</th>
<th>Demonstration/Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>29/02/2016</td>
<td>Introduction Research experience Basis of Knowledge</td>
<td>Basis of knowledge discussions &amp; EndNote</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>07/03/2016</td>
<td>Omega-3 Research</td>
<td>Learning contract &amp; research report information &amp; research group allocation.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>14/03/2016</td>
<td>Critical analysis of scientific literature</td>
<td>Critiquing scientific papers</td>
<td>Research experience (inductions)</td>
</tr>
<tr>
<td>4</td>
<td>21/03/2016</td>
<td>Data Interpretation and context</td>
<td>Discuss data interpretation</td>
<td>Research experience</td>
</tr>
<tr>
<td>5</td>
<td>28/03/2016</td>
<td>Evidence based research – diff study designs</td>
<td>Critiquing scientific papers</td>
<td>Research experience</td>
</tr>
<tr>
<td>6</td>
<td>04/04/2016</td>
<td>Proposal feedback</td>
<td>Presentations – learning contract proposals</td>
<td>Research experience</td>
</tr>
<tr>
<td>7</td>
<td>11/04/2016</td>
<td>Ethics &amp; legal requirements</td>
<td>Discussion on statin treatment &amp; side effects And your induction experience</td>
<td>Research experience</td>
</tr>
<tr>
<td>8</td>
<td>18/04/2016</td>
<td>Data collection, management and referencing</td>
<td>Data analysis</td>
<td>Research experience</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>How to write a manuscript</td>
<td>Research report</td>
<td>Research experience</td>
</tr>
<tr>
<td>10</td>
<td>02/05/2016</td>
<td>No class</td>
<td>No class</td>
<td>Research experience</td>
</tr>
<tr>
<td>11</td>
<td>16/05/2016</td>
<td>PhD student research experience</td>
<td>Research report</td>
<td>Research experience</td>
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<tr>
<td>12</td>
<td>30/05/2016</td>
<td>Research careers</td>
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</table>

Mid-Session Recess 25th April-29th April

<table>
<thead>
<tr>
<th>Week</th>
<th>Week Commencing</th>
<th>Lecture</th>
<th>Tutorial</th>
<th>Demonstration/Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>02/05/2016</td>
<td>Data collection, management and referencing</td>
<td>Data analysis</td>
<td>Research experience</td>
</tr>
<tr>
<td>10</td>
<td>09/05/2016</td>
<td>How to write a manuscript</td>
<td>Research report</td>
<td>Research experience</td>
</tr>
<tr>
<td>11</td>
<td>16/05/2016</td>
<td>No class</td>
<td>No class</td>
<td>Research experience</td>
</tr>
<tr>
<td>12</td>
<td>23/05/2016</td>
<td>PhD student research experience</td>
<td>Research report</td>
<td>Research experience</td>
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<td>13</td>
<td>30/05/2016</td>
<td>Research careers</td>
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</table>

Study Recess 6th June-10th June

UOW Exam Period 11th June-23 June

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*The above timetable should be used as a guide only, as it is subject to change. Students will be advised of any changes as they become known.
Section B: Assessment

Assessment Summary

<table>
<thead>
<tr>
<th>Assessment Item</th>
<th>Form of Assessment</th>
<th>Due Date</th>
<th>Return/feedback Due date</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment 1</td>
<td>Participation in Class Discussion</td>
<td>All weeks</td>
<td>31 May</td>
<td>20%</td>
</tr>
<tr>
<td>Assessment 2</td>
<td>Learning Contract/Proposal</td>
<td>5 April</td>
<td>12 April</td>
<td>30%</td>
</tr>
<tr>
<td>Assessment 3</td>
<td>Research Report</td>
<td>31 May</td>
<td>Final marks released</td>
<td>50%</td>
</tr>
<tr>
<td>Total Marks</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Details of Assessment Tasks

Assessment tasks will be marked using explicit criteria that will be provided to students prior to submission.

**Assessment 1**
- **Participation in Class Discussion**
- **Due date**: All weeks
- **Weighting**: 20%
- **Submission**: N/A
- **Type of Collaboration**: Individual Assessment
- **Length**: N/A
- **Details**: You will be given a mark based on your participation in discussions during seminars/tutorials throughout the session. This will involve preparation prior to tutorials, e.g. relevant readings on which you will be required comment during class discussions.
- **Style and format**: Class Participation
- **Subject Learning outcomes**: 1-5

**Assessment 2**
- **Learning Contract/Proposal**
- **Due date**: by 4pm for written and oral presentation during class time in week 6
- **Weighting**: 30%
- **Submission**: Submit an electronic copy of your written learning contract/proposal and your oral presentation by emailing directly to the co-ordinator/lecturer.
- **Type of Collaboration**: Individual Assessment
- **Length**: ~ 4 A4 pages (1.5 spacing) and up to 10 slides
- **Details**: Explained in class. You will be required to write a learning contract/proposal and to do a 10 minutes presentation on the aims and procedures for your research experience in a specific research laboratory.
- **Style and format**: Report and oral presentation (in powerpoint)
- **Subject Learning outcomes**: 2 and 5

**Assessment 3**
- **Research Report**
- **Due date**: By 4pm
- **Weighting**: 50%
- **Submission**: Submit an electronic copy of your assessment by emailing directly to the co-ordinator/lecturer
- **Type of Collaboration**: Individual Assessment
- **Length**: ~ 10 A4 pages (1.5 spacing)
- **Details**: Write a report on your research group experience based on your learning contract. You will discuss if you achieved your goals and if your strategies to achieve them worked. If not, you will discuss how you would improve your strategies.
- **Style and format**: Report
- **Subject Learning outcomes**: 1-5

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Minimum Requirements for a Pass in this Subject

To receive a clear pass in this subject a total mark of 50% or more must be achieved. In addition, failure to meet any of the minimum performance requirements is grounds for awarding a Technical Fail (TF) in the subject, even where total marks accumulated are greater than 50%.

The minimum performance requirements for this subject are:

- attempt all assessment tasks
- pass all assessment tasks including the final assessment task
- meet the minimum participation requirements set out below.

Minimum Student Attendance and Participation

It is expected that students will allocate 12 hours per week to this subject, including any required class attendance, completion of prescribed readings, research experience and assessment tasks.

Student attendance at tutorials, practicals, seminars and/or simulations is compulsory and students must attend 100% of classes. Absences will require the submission of an application for Academic Consideration via SOLS and the presentation of suitable documentation, for example a Medical Certificate, to Student Central as soon as practical. For further details about applying for academic consideration visit the Student Central webpage:

Scaling

Scaling will not occur in this subject.

Late Submission

Late submission of an assessment task without an approved extension of the deadline is not acceptable. If you are unable to submit an assessment due to extenuating circumstances (e.g. medical grounds or compassionate grounds), you can make an application of academic consideration. Not all circumstances qualify for academic consideration. For further details about applying for academic consideration visit the Student Central webpage:

Late Submission Penalty

Marks will be deducted for late submission at the rate of 5% of the total possible marks for that particular assessment task per day. This means that if a piece of work is marked out of 100, then the late penalty will be 5 marks per day (5% of 100 possible marks per day). The formula for calculating the late penalty is: the total possible marks x 0.05 x number of days late. For the purposes of this policy a weekend (Saturday and Sunday) will be regarded as two days.

For example:

- Student A submits an assessment which is marked out of 100. The assessment is submitted 7 days late. This means that a late penalty of 35 marks will apply (100 x 0.05 x 7). The assessment is marked as per normal out of 100 and is given a mark of 85/100, and then the late penalty is applied. The result is that the student receives a final mark of 50/100 for the assessment (85 (original mark) – 35 marks (late penalty)) = 50/100 (final mark)).

- Student B submits a report which is marked out of 20. The report is submitted three days late. This means that a late penalty of 3 marks will apply ((20 x 0.05 x 3). The report is marked as per normal out of 20 and is given a mark of 17/20, and then the late penalty is applied. The result is that the student receives a final mark of 14/20 for the report (17 (original mark) – 3 marks (late penalty)) = 14/20 (final mark)).

No marks will be awarded for work submitted either after the assessment has been returned to the students or more than two weeks after the due date, whichever is the sooner. This does not apply to
situations where a particular assessment task is undertaken by students at different times throughout
the session, but where the assessment is based on experiments or case studies specific to a student.
In this case no marks will be awarded for work submitted more than two weeks after the due date.

Notwithstanding this, students must complete all assessment tasks to a satisfactory standard and
submit them, regardless of lateness or loss of marks, where submission is a condition of satisfactorily
completing the subject.

Supplementary Assessments
This subject has been identified as unsuitable for supplementary assessment, and no supplementary
assessment will be offered.

System of Referencing Used for Written Work
The Author-Date (Harvard) referencing system should, unless otherwise specified for a particular
assessment (check Details of Assessment Tasks), be utilised. A summary of the Harvard system can

Use of Internet Sources
Students are able to use the Internet to access the most current information on relevant topics and
information. Internet sources should only be used after careful critical analysis of the currency of the
information, the role and standing of the sponsoring institution, reputation and credentials of the
author, the clarity of the information and the extent to which the information can be supported or
ratified by other authoritative sources.

Plagiarism
The full policy on Academic Integrity and Plagiarism is found in the Policy Directory on the UOW
website.

"The University's Academic Integrity and Plagiarism Policy, Faculty Handbooks and subject guides
clearly set out the University's expectation that students submit only their own original work for
assessment and avoid plagiarising the work of others or cheating. Re-using any of your own work
(either in part or in full) which you have submitted previously for assessment is not permitted without
appropriate acknowledgement. Plagiarism can be detected and has led to students being expelled
from the University.

The use by students of any website that provides access to essays or other assessment items
(sometimes marketed as ‘resources’), is extremely unwise. Students who provide an assessment item
(or provide access to an assessment item) to others, either directly or indirectly (for example by
uploading an assessment item to a website) are considered by the university to be intentionally or
recklessly helping other students to cheat. This is considered academic misconduct and students
place themselves at risk of being expelled from the University."

Submission of Assessments
Refer to the submission requirements under the details of the individual assessments. Students
should ensure that they receive a receipt/evidence acknowledging assessment submission. Students
will be required to produce this in the event that an assessment task is considered to be lost. Students
are also expected to keep a copy of all their submitted assignments in the event that re-submission is
required.

Assessment Return
Students will be notified when they are able to view their marked assessment. In accordance with
University Policy marked assignments will usually only be held for 21 days after the declaration of
marks for that assignment.
Section C: General Advice

Students should refer to the Faculty of Science, Medicine and Health website for information on policies, learning and support services and other general advice.

University Policies
Students should be familiar with the following University policies:

a. Code of Practice – Teaching and Assessment  

b. Code of Practice – Research, where relevant  

c. Student Charter  

d. Academic Integrity and Plagiarism Policy  

e. Student Academic Consideration Policy  

f. Course Progress Policy  

g. Graduate Qualities Policy  

h. Academic Complaints Policy (Coursework and Honours Students)  

i. Policy and Guidelines on Non-Discriminatory Language Practice and Presentation  

j. Workplace Health and Safety, where relevant  

k. Intellectual Property Policy  

l. IP Student Assessment of Intellectual Property Policy, where relevant  

m. Policy on Ethical Objection by Students to the Use of Animal and Animal Products in Coursework Subjects, where relevant  

n. Human Research Ethics Guidelines, where relevant  

o. Animal Research Guidelines, where relevant  

p. Student Conduct Rules and accompanying Procedures or Research Misconduct Policy for research students  
Student Support Services and Facilities
Students can access information on student support services and facilities at the following link. This includes information on "Academic Support", "Starting at University", "Help at University" as well as information and support on "Career's and Jobs". http://www.uow.edu.au/student/services/index.html

Student Etiquette
Guidelines on the use of email to contact teaching staff, mobile phone use in class and information on the university guide to eLearning ‘Netiquette’ can be found at http://www.uow.edu.au/student/elearning/netiquette/index.html

Version Control Table

<table>
<thead>
<tr>
<th>Version Control</th>
<th>Release Date</th>
<th>Author/Reviewer</th>
<th>Approved By</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20160128</td>
<td>Barbara Meyer – Subject Coordinator</td>
<td>Sonia Losinno – ADE Nominee</td>
<td>FINAL MHSA200 Autumn 2016 Subject Outline</td>
</tr>
</tbody>
</table>