



Faculty of Medicine  
School of Medical Sciences

# HESC4501

## EXERCISE PHYSIOLOGY RESEARCH SEMINARS

COURSE OUTLINE

Term 1, 2020

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Please read this manual/outline in conjunction with the following pages on the [School of Medical Sciences website](#):

- [Advice for Students](#)
- [Learning Resources](#)

(or see "STUDENTS" tab at [medicallsciences.med.unsw.edu.au](http://medicallsciences.med.unsw.edu.au) )

## HESC4501 Course Information

**Credit Points:** 6 UOC

### Course Prerequisites / Assumed Knowledge

MATH1041 – Statistics for Life & Social Sciences  
HESC2501 – Exercise Physiology  
and 12 UOC of Level 3 HESC Courses  
(HESC3504 or HESC3532 or HESC3541 or HESC3592)

### OBJECTIVES OF THE COURSE

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This main aim of this course is to introduce exercise physiology students to original scientific and clinical research. It provides training in critical interpretation of scientific and clinical research linked to the field of exercise science/physiology. This aims to provide students with the skills necessary to research (find), read understand and communicate clinical research to the general public with confidence thus improving the standard of their clinical practice.

### COURSE CO-ORDINATOR and LECTURERS

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Course Coordinator:

**Dr Chris Maloney (CM)**

[c.maloney@unsw.edu.au](mailto:c.maloney@unsw.edu.au)

School of Medical Sciences Ph 9385 1362

Office: Room 327, Level 3, East Wing, Wallace Wurth

Students wishing to see the course coordinators should make an appointment *via* email as our offices are not readily accessible. We will organize to meet you in a convenient location elsewhere in the building.

Lecturers in this course:

**Dr Chris Maloney (CAM)**

[c.maloney@unsw.edu.au](mailto:c.maloney@unsw.edu.au)

**A/Prof. Jeanette Thom (JT)**

[j.thom@unsw.edu.au](mailto:j.thom@unsw.edu.au)

Program Contact (please submit enquiries via the UNSW Student Portal Web Forms):

<http://unsw.to/webforms>

Tel: (02) 9385 2557

## **COURSE STRUCTURE and TEACHING STRATEGIES**

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Learning activities occur on the following days and times:

### **Lectures:**

There will be two one-hour lectures given in weeks 1- 5 (see the timetable below)

### **Collaborative Learning Session (TLB):**

These 2 hour sessions\* will be held on Wednesday 11-1pm and 2-4pm; Thursday 9-11pm and 11-1pm; Friday 2-4pm, 4pm-6pm in weeks 1-10 (The Friday groups will have a Tuesday session in week 11 due to public holiday in week 8).

\*All students are expected to attend the session to which they enrolled

### **Seminars (SEM):**

These 1 hour sessions will be held in weeks 6-10 students are expected to attend 5 of these sessions to which they are enrolled. (see the timetable below)

Students are expected to attend all scheduled activities for their full duration (2 hours of lectures per week and up to 4 hours of practical and collaborative learning sessions per week). Students are reminded that UNSW recommends that a 6 units-of-credit course should involve about 150 hours of study and learning activities. The formal learning activities are approximately 40 hours throughout the term and students are expected (and strongly recommended) to do at least the same number of hours of additional study

### **Independent study:**

Alone or in a group, independent studies will be an essential component of the course, as you will be asked to retrieve publications from databases, synthesise and have critical reading on what you will present. You will also need to finalise the individual talk and the group work outside of course contact hours. This strategy is to foster your independence as an exercise scientist/physiologist to gather information to inform your practice facilitating an evidence-based approach.

## **APPROACH TO LEARNING AND TEACHING**

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The learning and teaching philosophy underpinning this course is centred on student learning and aims to create an environment which interests and challenges students. The teaching is designed to be engaging and relevant in order to prepare students for future careers.

### **How the course relates to the Exercise Physiology profession**

The information and ideas presented in this course will enable students to build critical thinking and good communication skills necessary for professionals. Good communication skills are necessary to build an effective relationship between the patient and the practitioners. Along with the knowledge base of techniques used in experimental research, an understanding of how research is published and ranked is a prerequisite to appreciate the quality of a piece of research. It is essential that a professional carer has a solid understanding of research in the field of Exercise Sciences to appreciate the novel techniques and progress that has been made; enabling them to prescribe exercise programs backed by evidence that has been rigorously examined.

## **How the course relates to other courses in the Exercise Physiology program**

Together with Research Projects HESC4551 and Research Internships HESC4561, HESC 4571, this 4<sup>th</sup> year course builds upon the knowledge accumulated **throughout the whole program**. It uses previously understood fundamental concepts to build the necessary critical thinking towards professional independence.

Although the primary source of information for this course is the lecture material, effective learning can be enhanced through self-directed use of other resources such as textbooks and Web based sources. Your practical classes will be directly related to the lectures and it is essential to prepare for practical classes before attendance. It is up to you to ensure you perform well in each part of the course; preparing for classes; completing assignments; studying for exams and seeking assistance to clarify your understanding.

## **STUDENT LEARNING OUTCOMES**

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HESC4501 will develop those attributes that the Faculty of Medicine has identified as important for an Exercise Scientist/Physiologist Graduate to attain. These include; skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

### Graduate Attributes

- A. Research, inquiry and analytical thinking abilities
- B. The capability and motivation for intellectual development
- C. Ethical, social and professional understanding
- D. Effective communication
- E. Teamwork, collaborative and management skills
- F. Information Literacy – the skills to locate, evaluate and use relevant information.

At the end of the course you should be able to:

- Describe the scientific research process to facilitate critical evaluation and communication of scientific evidence for translation into clinical practice.
- Recognise significant research advances made in the exercise science field. Summarize and present these in both written and oral formats
- Critically appraise original research, including methodology, statistical results and ethical considerations for integration into best practice and research in exercise science
- Demonstrate interpersonal skills to participate effectively in a teamwork environment
- Critically self-evaluate and reflect upon participation/effort, effectiveness and productivity in a team environment and an individual learning scenario

## **COURSE EVALUATION AND DEVELOPMENT**

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For course evaluation, feedback has been gathered at the completion of the course, using among other means, UNSW's Course and Teaching Evaluation and Improvement Process and myExperience. Student feedback is taken seriously, and continual improvements are made to the course based, in part, on such feedback.

This course has added practical sessions that scaffold the transition to a research centred approach to learning and provided essential skills required to enable an exercise scientist/physiologist to develop evidence-based practice.

## TEXTBOOKS AND OTHER RESOURCES

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These resources will take the form of textbooks, journal articles or web-based resources. If available, links to the electronic form of these resources will be put on the course Moodle page.

A good reference for this course is the following text:  
Evidence-Based Practice in Exercise Science: *The six step approach*.  
William E Amonette, Kirk L English and William J Kraemer.

Human Kinetics, Lower Mitcham, SA Australia

See also [medalsciences.med.unsw.edu.au/students/undergraduate/learning-resources](https://medalsciences.med.unsw.edu.au/students/undergraduate/learning-resources)  
<https://medalsciences.med.unsw.edu.au/students/undergraduate/advice-students>

## ASSESSMENT PROCEDURES

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### Summary of Assessments

	Weight	Due Date
<b>6 of the Tutorials will be assessed</b>		
Tutorial 1: Self Directed and Reflective Learning	5%	Week 1
Tutorial 2: Looking for Information/ How to read a research article	5%	Week 2
Tutorial 4: Dealing with being in the spotlight: PLANNING	5%	Week 4
Tutorial 7: Working with Excel	5%	Week 7
Tutorial 8: Basic Statistical Analysis	5%	Week 8
Tutorial 10: Use of Bibliography Software	5%	Week 10
<b>PAPER REVIEW (individual task)</b>		
Oral Presentation (PowerPoint Presentation)	25%	Weeks 6
<b>INNOVATION IN EXERCISE PHYSIOLOGY (group task)</b>		
Oral Presentation (Talk 15%, Poster 5%)	20%	Week 10/11
Peer mark on effort and engagement (peer within group assessment)	10%	Week 10/11
Online Content (Completed self-assessment form)	10%	Week 11
<b>ePortfolio</b> (Use weekly)	5%	Week 11

All assignments are to be submitted via the course Moodle Page.

**Penalties for late submission of assignments** – In cases where an extension has NOT been granted, the following penalties will apply:

1. For assignments submitted one day after the due date, **a penalty of 50%** of the maximum marks available for that assignment will be incurred.
2. Assignments received two or more days after the due date **will not be allocated a mark**, however, these assignments **must** still be submitted to pass the unit.

## GENERAL INFORMATION

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### Attendance Requirements

For details on the Policy on Class Attendance and Absence see [Advice for Students](#) and the [Policy on Class Attendance and Absence](#).

Guidelines on extra-curricular activities affecting attendance can be found on the School of Medical sciences Website. [Advice for Students – Special Consideration](#)

Attendance at practical classes is compulsory and must be recorded in the class roll at the start of each class. Arrival more than 15 minutes after the start of the class will be recorded as non-attendance. It is your responsibility to ensure that the demonstrator records your attendance and no discussions will be entered into after the completion of the class. Satisfactory completion of the work set for each class is essential. It should be noted that non-attendance for other than documented medical or other serious reasons, or unsatisfactory performance, for more than 1 practical class during the session may result in an additional practical assessment exam or ineligibility to pass the course. Students who miss practical classes due to illness or for other reasons must submit a copy of medical certificates or other documentation to the course coordinator.

### Practical Classes

The practical class (TUTs and TLBs) is an opportunity for students to develop graduate attribute C by behaving in an ethical, socially responsible and professional manner within the practical class.

Students must take due care with biological and hazardous material and make sure all equipment is left clean and functional. In the interests of safety, special attention should be paid to any precautionary measures recommended in the notes. If any accidents or incidents occur, they should be reported immediately to the demonstrator in charge of the class who will record the incident and recommend what further action is required.

For more details see [Advice for Students-Practical Classes](#)

### Special Consideration

Please see [UNSW-Special Consideration](#) and [Student Advice-Special Consideration](#)

If you unavoidably miss the progress exam, you must lodge an application online via myUNSW for special consideration. If your request for consideration is granted an alternative assessment will be organised which may take the form of a supplementary exam or increased weighting of the final exam.

See: [Student-Advice-Reviews and Appeals](#)

### Student Support Services

See: [Student Advice-Student support services](#).

### Academic Integrity and Plagiarism

The [UNSW Student Code](#) outlines the standard of conduct expected of students with respect to their academic integrity and plagiarism.

More details of what constitutes plagiarism can be found [here](#)

## **LECTURE and PRACTICAL OUTLINES**

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### **Lecture 1 (Dr Chris Maloney) Introduction Lecture/Course Structure/The Research Method**

Briefly introduce the rationale for the course, alignment within Ex Phys Degree, learning outcomes, assessment tasks. Cover the principals of “The research method” alignment with the philosophy of “Evidence based practice” for Exercise Physiology.

### **Lecture 2 (Dr Chris Maloney) Looking for Information/ How to read a research article**

Introduce the principles of searching for research articles, what are you looking for? How to read a paper, how to efficiently read a paper to get the main ideas.

### **Lecture 3 (Dr Chris Maloney) Framing a Research Question/ Study design**

How to appropriately ask a research question that is meaningful (refer to current clinical/scientific research literature) and answerable. How to then design a study to answer that question.

### **Lecture 4 (Dr Chris Maloney) Written and oral communication in science**

How to effectively communicate outcomes of clinical/scientific research using written forms (Abstracts, reviews, original articles) and oral presentations.

### **Lecture 5 (Dr Chris Maloney) IDEAS, Innovation & Intellectual property**

What is innovation? What is IP and how to realise the value of research. Taking Innovation to Market. Selling not only ideas, but also the value of an individual’s skill set (important for future career).

### **Lecture 6 (Dr Chris Maloney) Statistics**

Introduction to the important concepts in applied statistics that play a role in project design, data measurement and evaluation in research.

### **Lecture 7 (Dr Chris Maloney) Ethics: Knowing the Legislation writing a proposal**

Overview of the legislation for human and animal research. Writing a research proposal: the ethics application.

### **Lecture 8 (Dr Chris Maloney) Literature Reviews**

What are the different types of reviews: Systematic reviews (Meta analysis, Cochrane reviews etc.) Vs Narrative and descriptive reviews (opinion articles, comments).

### **Lecture 9 (A/Prof. Jeanette Thom and Dr Chris Maloney) Population domains covered in exercise physiology**

An overview of the different research domains in which exercise physiologist research: Cancer, Kidney, Metabolic (obesity and Diabetes), Muscular skeletal, Healthy populations. Covering projects available in 4<sup>th</sup> year HESC4551/61.



## **Overview of Tutorials**

### **Tutorial 1 Self directed and reflective Learning/ ESSA position statements “evidence based practice”**

Students will learn the benefits of using ePortfolios to catalogue what research has been done, to reflect on this, to be able to apply new knowledge to evidence base practice. In class students will start to use an ePortfolio to reflect on their attitudes towards research and communication via oral presentations.

Students will read an ESSA position statement, pick one aspect of the statement and determine the level of evidence that supports the statement. They will also search for additional support in the current literature.

### **Tutorial 2 Looking for Information/ How to read a research article.**

Structured tutorial where students will search for an article of interest (This is to be presented in weeks 6 to10). Students will then briefly read the article extracting and summarising the main ideals that the article contains, listing any strengths or weaknesses. Computer required.

### **Tutorial 3 Design a talk getting across scientific messages**

Structured tutorial where students will start designing their PowerPoint slide presentation that will be used in weeks 6 to10. Students will be expected to have a outline of each slide finalised by the end this session. Computer required.

### **Tutorial 4 Dealing with being in the spotlight: PLANNING.**

Students will plan in class and deliver a 3-minute talk on any subject they wish in front of the tutorial group. Students will be expected to Plan the talk so that the main points are well delivered so that the talk flows well and fills the allocated time.

### **Tutorial 5 Working as a team, Innovation Concept design**

Students will devise the Innovation that they will present as a group. Students will firstly brain storm the ideas and discuss merits and faults of idea. Use of online research will allow students to consolidate their Idea.

### **Tutorial 6 Constructing a poster and abstract**

Students will design their poster working as a group to complete the task.

### **Tutorial 7 Working with data: Using Excel**

Students will be given an excel data sheet that is to be analysed. Students will be taught how to organise and curate data sets to see trends and perform basic statistical tests.

### **Tutorial 8 Applied Medical Statistics: Overview of process to select appropriate statistical tests to apply**

Students will learn the most common statistical tests that can be used to analyse medical science data why the tests are used and the meaning of the results obtained.

### **Tutorial 9 Statistics: Manipulating data sets.**

Students will learn how to use Statistics computer programs e.g. SPSS to perform statistical analysis.

## Tutorial 10 Use of Bibliography Software: Endnote and referencing.

Students will be asked to search for a mixture of article types (reviews, journal articles, websites books) on a given topic they will then insert these into Endnote. Using endnote and word students will create a mock text with referencing and create a bibliography.

### Course Timetable and Room allocation

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Class Type	Date	Weeks	Location	Size
Lecture	Mon 9AM-10AM	1-5	Mathews C	90
	Wed 10AM-11AM	1-5	Mathews C	90
TLB	Wed 11AM-1PM	1-10	Wurth G16	15
	Wed 2PM-4PM	1,2-10	Wurth G16, Wurth G08	15
	Thurs 9AM-11AM	1-10	Wurth G16	15
	Thurs 11AM-1PM	1-10	Wurth G16	15
	Fri 2PM-4PM	1-7, 9-10, 11*	Wurth G16	15
	Fri 4PM-6PM	1-7, 9-10, 11*	Wurth G16	15
Seminar	Mon 9AM-10AM	6-8, 10-11	Mat 105	15
	Mon 9AM-10AM	6-8, 10-11	Mat 231	15
	Mon 9AM-10AM	6-8, 10-11	Mat 101	15
	Wed 10AM-11AM	6-10	AGSM LG06	15
	Wed 10AM-11AM	6-10	Lib 176B	15
	Wed 10AM-11AM	6-10	Mat 107	15

Note \* Friday groups due to Easter will have a class in week 11 same time but in Wurth 17

**TIMETABLE**

	<b>Week of date</b>	<b>Lecture 1 (1hr) Tuesday 9-11am</b>	<b>Lecture 2 (1hr) Wednesday 10-11am</b>	<b>Tutorial/Lab/Prac (2hr) see above for time and place</b>
Week 1	17/2	<b>1:</b> Intro Lecture/ Course Structure / The research method (CAM)	<b>2:</b> Looking for information How to read a paper (CAM)	<b>1:</b> Self-directed and reflective Learning (CAM) Computing rooms <b>Q A/T</b>
Week 2	24/2	<b>3:</b> Framing a question/ Study Design (CAM)	<b>4:</b> Writing and Oral communication (CAM)	<b>2:</b> Looking for Information/ How to read a research article (CAM) Computing rooms <b>A/T</b>
Week 3	2/3	<b>5:</b> IDEAS, Innovation & Intellectual property (CAM)	<b>6:</b> Statistics (CAM)	<b>3:</b> Design a talk getting across scientific messages (CAM) Computing rooms
Week 4	9/3	<b>7:</b> Ethics: Knowing the Legislation writing a proposal (CAM)	<b>8:</b> Literature Reviews (CAM)	<b>4:</b> Dealing with being in the spotlight, PLANNING (CAM). Give a talk. Computing rooms <b>A/T</b>
Week 5	16/3	<b>9:</b> Exercise Physiology Research Domains and UNSW research (CAM/JT)		<b>5:</b> Working as a team, Innovation Concept design (CAM) Computing rooms
Week 6	23/3	Individual Talks 1, 2, 3	Individual Talks 4, 5, 6	<b>6:</b> Constructing a poster and abstract (CAM) Computing rooms
Week 7	30/3	Individual Talks 1, 2, 3	Individual Talks 4, 5, 6	<b>7:</b> Working with data. Using Excel (CAM) Computing rooms <b>Q</b>
Week 8	6/4	Individual Talks 1, 2, 3	Individual Talks 4, 5, 6	<b>8:</b> Applied Medical Statistics, Description: Selection of tests to apply (CAM) Computing rooms <b>Q</b>
Week 9	13/4	Individual Talks 1, 2, 3	Individual Talks 4, 5, 6	<b>9:</b> Statistical analysis: USING SPSS to analyse data sets (CAM) Computing rooms
Week 10	20/4	Posters 1, 2, 3	Posters 4, 5, 6	<b>10:</b> Use of Bibliography software endnote, referencing (CAM) Computing rooms <b>Q</b>

**Notes: CAM: Dr C Maloney ; JT AProf J Thom; A/T : Assessment Task; Q : Quiz**

## ASSESSMENT TASKS

### Paper Review - Oral presentation (Weeks 6-9; Individual task)

For the purpose of these seminars, you will present an original journal article (not a review article) related to the field of Exercise Science. In tutorial 2 you will select the article to be presented and in tutorial 3 you will further analyse the article and start to design the talk.

You will present the publication to the class in the format of a **6 minute** oral presentation followed by **3 minutes** of discussion. The tutor will mark the presentation according to the **Assessment criteria template** below in conjunction with the marking scheme on the next page. You will be given face-to-face feedback at the end of the session in which you present.

**The PowerPoint presentation** to be used during your Oral is to be posted via Moodle **no later than Monday morning in week 6:**

#### Assessment criteria template:

	Unsatisfactory	Below average	Satisfactory	Good	Excellent
<b>BACKGROUND CONTENT AND CONCLUSIONS</b>  /6	Introduction out of scope with the topic. Cannot be understood by a non-expert audience.	Introduction lacks scope with the topic and has inadequate details. Most concepts and terminology not described to allow understanding by a non-expert audience.	Introduction lacks scope with the topic. Many concepts and terminology not described to allow understanding by a non-expert audience.	Introduction well in scope with the topic. Most concepts and terminology described to allow understanding by a non-expert audience.	Introduction very well in scope with the topic. All concepts and terminology described to allow understanding by a non-expert audience.
<b>FIGURES</b>  /4	Description of the figures lacks major details, or methodology not described.	Description of the figures is mostly clear. Major inconsistencies in experimental design. No dissociation between description and interpretation.	Descriptions of the figures to allow understanding by non-expert audience, but some details are lacking. Not always dissociation between description and interpretation.	Clear description of the figures to allow understanding by non-expert audience. Dissociation between description and interpretation.	Very clear description of the figures to allow understanding by non-expert audience. Clear dissociation between description and interpretation.
<b>STYLE</b>  /10	The font, colour graphics and slide layout used distracted from the presentation. Figures used not labelled with major errors. No logical structure to presentation. Delivery unclear or inaudible. Not confident with poor body language.	The font, colour graphics and slide layout used sometimes distracted from the presentation. Figures used and labelled with some errors. Lacking clear and logical structure throughout. Delivery mostly clear, and technical. Some major lapses in body language observed	The font, colour graphics and slide layout used sometimes distracted from the presentation. Figures used and labelled with some errors. Mostly clear and logical structure throughout. Delivery mostly clear, and technical. Some major lapses in body language observed	The font, colour graphics and slide layout used enhanced the presentation. Figures used and clearly labelled. Minor errors. Clear and logical structure throughout. Delivered clearly, well-paced, articulate and technical. Confident stance and body language. Enthusiastic.	The font, colour graphics and slide layout used greatly enhanced the presentation. Figures used and clearly labelled. No errors. Clear and logical structure throughout. Delivered clearly, well-paced, articulate and technical. Confident stance and body language. Enthusiastic and interesting.
<b>QUESTIONS</b>  /5	Responses demonstrated little or no understanding of complex technical and contextual issues Significant number of errors made in answers to questions.	Responses demonstrated some understanding of complex technical and contextual issues A number of major errors made in answers to questions.	Responses demonstrated understanding of complex technical and contextual issues Accurate answers to questions drawing from related literature.	Responses demonstrated clear understanding of complex technical and contextual issues Strongly argued and accurate answers to questions drawing from related literature.	All responses demonstrated clear understanding of complex technical and contextual issues Consistently strongly argued and accurate answers to questions drawing from related literature.

# Oral Presentation Marking Scheme - HESC 4501

Student ..... Date

Examiner

<b><u>Total Mark</u></b>
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BACKGROUND CONTENT AND CONCLUSIONS	Max. Marks = 6	Unsatisfactory (mark = 0)	Below average (0.5)	Satisfactory (mark = 1.0)	Good (mark = 1.5)	Excellent (mark = 2.0)	Mark
Clear description of topic, Aims/Hypothesis of paper explained	2						
Structure is logical & easy to follow, Able to be understood by a non expert audience	2						
Clear and Concise Conclusions	2						
Figures	Max. Marks = 4	Unsatisfactory (mark = 0)	Below average (0.5)	Satisfactory (mark = 1.0)	Good (mark = 1.5)	Excellent (mark = 2.0)	Mark
Figure described fully	2						
Described not interpretation	2						
Style	Max. Marks = 10	Unsatisfactory (mark = 0)	Below average (0.5)	Satisfactory (mark = 1.0)	Good (mark = 1.5)	Excellent (mark = 2.0)	Mark
Confident voice (not read)	2						
Professional, enthusiastic delivery	2						
Slides attractive	2						
Font size & colour easy to read	2						
Good use of pictures, diagrams & tables	2						
Questions	Max. Marks = 5	Unsatisfactory (mark = 0)	Below average (0.75)	Satisfactory (mark = 1.5)	Good (mark = 2.0)	Excellent (mark = 2.5)	Mark
Attempted to interpret & answer questions	2.5						
Understood concepts, strong argument, accurate answers	2.5						

Comments:

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# Innovation in Exercise Physiology

## Oral poster presentation (Week 10/11)

This assessment is a **group** assessment; you will be assigned to a group.

**As part of a team, You will be asked to create a tool, a protocol or a technique with an application to Exercise Science/Physiology. You will use research to show the gap that the innovation is filling, the feasibility of the innovation and the marketability of the innovation**

You will present the innovation to the class in Poster format with a 7 minute presentation followed by 2 minutes discussion.

The tutor will mark the presentation (15%) and the poster (5%) according to the **Assessment criteria template** below, in conjunction with the **marking template** on the following page.

Students will **assess their peers** (DUE week 11) based on the contribution they perceive each to have made to the group's work. This will be scored online (DUE week 11) and will adjust each members overall mark for this assignment. If students fail to complete the peer evaluate then they themselves will receive **0%** for their peer mark.

Students will also complete a **Self-Assessment Form - A Reflection on Working in Groups** (see below) and will post this online via Moodle

### Assessment criteria template for the following: Oral Poster Presentation

	<b>Unsatisfactory</b>	<b>Below average</b>	<b>Satisfactory</b>	<b>Good</b>	<b>Excellent</b>
<b>BACKGROUND OF INVENTION</b>	Very unclear or no description of the problem that the invention wants to solve.	Poor description of the problem that the invention wants to solve.	Moderately clear description of the problem that the invention wants to solve.	Clear description of the problem that the invention wants to solve.	Very clear description of the problem that the invention wants to solve.
<b>DESCRIPTION OF INVENTION</b>	Poor description of the invention and Lack of creativity and innovation.	Unclear description of the invention. Marginally creative and innovative.	Clear description of the invention Moderately creative and innovative.	Clear description of the invention using adequate communication tools. Creative and innovative.	Very clear description of the invention using adequate communication tools. Highly creative and innovative.
<b>QUESTIONS</b>	Significant number of errors made in answers to questions.	A number of major errors made in answers to questions.	Accurate answers to questions. Some minor errors.	Strongly argued and accurate answers to questions.	Consistently strongly argued and accurate answers to questions.

**Marking Template for Group Poster Presentation: Date**

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<u>Group</u>	<u>Total Mark</u>
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**Students** .....

**Examiner** .....

<b>Background</b>	<b>Max Marks = 4</b>	<b>Unsatisfactory (mark = 0)</b>	<b>Below average (0.5)</b>	<b>Satisfactory (mark = 1.0)</b>	<b>Good (mark = 1.5)</b>	<b>Excellent (mark = 2.0)</b>	<b>Mark</b>
Adequate justification for invention. If for a disease it's described, if healthy population reason for use. Gap filled by this product well described?	2						
Evidenced of review of current knowledge i.e Scientific Literature, pitched to a non expert audience	2						
<b>Description/Content</b>	<b>Max Marks = 6</b>	<b>Unsatisfactory (mark = 0)</b>	<b>Below average (0.5)</b>	<b>Satisfactory (mark = 1.0)</b>	<b>Good (mark = 1.5)</b>	<b>Excellent (mark = 2.0)</b>	<b>Mark</b>
How is this innovative? A clear description of features	2						
Pictures, diagrams & tables Used well, Use of other patents acknowledged or Evidence of no other similar products/ patents	2						
Structure is logical & easy to follow, Summary of strengths & weaknesses	2						
<b>Presentation Style</b>	<b>Max Marks = 5</b>	<b>Unsatisfactory (mark = 0)</b>	<b>Below average (0.75)</b>	<b>Satisfactory (mark = 1.5)</b>	<b>Good (mark = 2.0)</b>	<b>Excellent (mark = 2.5)</b>	<b>Mark</b>
Confident voice, audience engagement & timing (not too short or long)	2.5						
Ability to interpret & answer questions	2.5						
<b>Poster</b>	<b>Max Marks = 5</b>	<b>Unsatisfactory (mark = 0)</b>	<b>Below average (0.75)</b>	<b>Satisfactory (mark = 1.5)</b>	<b>Good (mark = 2.0)</b>	<b>Excellent (mark = 2.5)</b>	<b>Mark</b>
Layout attractive	2.5						
Font size & colour easy to read	2.5						

Comments:

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**Assessment criteria template for the following:** Online Content (Completed self-assessment form).

The completed form as a whole will be marked using the following criterion.

	<b>Unsatisfactory</b>	<b>Below average</b>	<b>Satisfactory</b>	<b>Good</b>	<b>Excellent</b>
<b>PERSONAL INSIGHT and ABILITY TO DRAW ON EXAMPLES</b>	Very little or no detail given of abilities, Very little or no detail given of weaknesses, Very little or no examples cited.	Some detail given of abilities, Some detail given of weaknesses, Very little or no examples cited.	Lists own role and contributions made, attempt made to discover weaknesses, a few examples cited	Can Articulate own role and contributions made, A number of examples cited, Examples demonstrate strengths, Weaknesses listed.	Can Articulate own role and contributions made, Many examples cited, Examples clearly demonstrate strengths and contribution to the team, Can Articulate weaknesses.
<b>DEMONSTRATES AN UNDERSTANDING OF TEAMWORK</b>	Seems focussed on own goals rather than enhancing the teams effort, no examples of teamwork cited	Mainly focussed on own goals rather than enhancing the teams effort, minimal effort made to link own goals with teams goals, no examples of teamwork cited	Seems to appreciate teamwork, Appears to note the importance of focussing on the TEAMS objectives. One or two examples cited	Seems to appreciate individual strengths and weaknesses can be compensated by teamwork, Appears to note the importance of focussing on the TEAM'S objectives, Takes initiative, a number of examples of teamwork cited	Appears to value multiple perspectives, Apparently seeks to resolve conflicts, Seems to appreciate individual strengths and weaknesses can be compensated by teamwork, Appears to note the importance of focussing on the TEAM'S objectives, Takes initiative. <b>Many</b> examples given that clearly show teamwork

**Marking Template** Completed self-assessment form:

<b>Section</b>	<b>Unsatisfactory</b>	<b>Below average</b>	<b>Satisfactory</b>	<b>Good</b>	<b>Excellent</b>
	<b>Marks</b>				
<b>Communication</b>	0	0.5	1	1.5	2
<b>Task Completion</b>	0	0.5	1	1.5	2
<b>Leadership</b>	0	0.5	1	1.5	2
<b>Team Work</b>	0	0.5	1	1.5	2
<b>Improving Self</b>	0	0.5	1	1.5	2

Marks will be given according to the Assessment Criterion table above and the following  
In each section marks awarded as follows:

- A half mark for 1 statement i.e. "I communicated in a respectful way"
- 1 mark for 2 or more statements
- 1.5 marks for 2 or more statements plus a reflection on weakness
- 2 marks for 2 or more statements plus a reflection on strengths and weakness and how to improve

The Poster to be presented is to be submitted via the course Moodle page on-line no later than **Monday Week 10**.

The peer assessment of other students in your group is to be submitted via Moodle online **no later than Friday in week 11**

The self-assessment form below - A Reflection on Working in Groups (an electronic version will be available to fill in), is to be submitted online **no later than Friday in week 11**



## Self-Assessment Form - A Reflection on Working in Groups

Fill in the table and use it to self-reflect on **your** experiences while working as part of this team. Think about **your** strengths i.e. what you feel are your greatest attributes (I speak clearly, I am organised, I am inclusive, I help resolve conflicts, I am enthusiastic, I share the load, I cooperate, etc.....) and how they enhanced the team work (**GIVE EXAMPLES:** I emailed team members to keep them up to date, I collected journal articles, I had material ready so it could be included, I was a spokesperson for the team, I listened to the ideas of others). We all have weaknesses, as a learner and a team member it is beneficial to acknowledge them so that we can improve e.g. I am a person who has trouble starting large tasks, so initially I was late getting information to the group, I then made sure I did a little bit (something) each day and found I got more done. The form must be filled in using Times New Roman, 10 FONT, 1 page only. These instructions and the lines in the form can be removed to give you room to complete the form.

Reflect on <b>YOUR</b> Strengths and Weaknesses for each category. Cite examples (What did <b>you</b> do? (not your group) How were strengths applied?).	
<p><b>COMMUNICATION:</b> How did <b>you</b> communicate with members of your group and to others? (not we set up a facebook page)</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p><b>TASK COMPLETION:</b> How did <b>you</b> complete tasks for the group?</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p><b>LEADERSHIP:</b> How did <b>you</b> display leadership?</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p><b>TEAMWORK:</b> What was <b>your</b> role in the group, how did you display teamwork skills?</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p><b>IMPROVING YOURSELF:</b> What teamwork skills did <b>you</b> learn/Improve? How can <b>you</b> continue to Improve</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

## Student ePortfolio (Due Week 10)

### ePortfolio assessment

The purpose of the eportfolio is for you to intentionally inquire and reflect on your learning progress, collect evidence of learning, and integrate your learning into your wider degree program and your professional and personal aspirations. While the mark allocated is small, this activity will help you to evaluate your learning achievements, identify your learning needs, and collect evidence of learning for future use.

### ePortfolio Instructions

- In the first tutorial we will start with a few questions on research and oral communications to start your Portfolio and get you in the habit of collecting evidence of learning and reflecting
- Please write your learning stories in the Personal ePortfolio Moodle course site: OuBlog.
- You can write your learning/ reflective summary any time daily to weekly if you wish. At a minimum you must review your portfolio, update new content from your learning activities, and write an inquiry, integration and/or reflection on your learning progress **at least once a fortnight. Thus you will have 5 entries at a minimum.**
- For your **final ePortfolio submission** you should select from your portfolio content that provides insight into your use of the portfolio to provide a two page 1000-1500 word summary of your reflections for the course and beyond. (refer to eportfolio assessment rubric in course outline).
- Submit by 9am on Friday of Week 11 for assessment. This accounts for 5% of the final course mark.

**If you do not write any comments in your ePortfolio then you cannot get the full 5 percent, a minimum of two entries is needed or you receive zero.**