



UNSW
AUSTRALIA

Medical Sciences
Medicine

Exercise Physiology Program

HESC1511

Exercise Programs and Behaviour

Semester 2, 2015
Course Outline

CRICOS Provider Code 00098G

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

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

(or see "STUDENTS" tab at medicalsciences.med.unsw.edu.au)

Course Staff

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Lectures	Wednesday 12-1pm Thursday 9-10am	Wallace Wurth LG03 Wallace Wurth LG03

Course Details

Credit Points: 6 UoC

Course Prerequisites / Assumed Knowledge

HESC1501 Introductory Exercise Science
PSYC1001 Psychology 1A

Course Description

Exercise Programs and Behaviour (HESC1511) is a 1st year Health and Exercise Science course worth six Units of Credit (6 UOC). The course is required as part of study for the degree of Bachelor of Exercise Physiology. The course will build on the information you have gained in Introductory Exercise Science (HESC1501) and Psychology 1A (PSYC1001). Practical training in this course will encompass: fitness assessments, basic pre-screening and interview techniques, and exercise technique and prescription. Psychological aspects of exercise, in particular motivation, adherence and addiction, will also be addressed. These skills will be put into clinical practice with students developing and delivering a supervised exercise program for a healthy adult.

Aims of the Course

Building on basic skills learned in HESC1501, the aims of this course are to:

1. Expose students to the principles underlying motivational interviewing;
2. Develop an understanding of the principles of screening and safe exercise testing;
3. Develop an understanding of the principles of exercise programming;
4. Develop an understanding of the psychosocial factors contributing to exercise engagement and adherence

Student Learning Outcomes

HESC1511 will develop the following skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

On completion of this subject students should be able to:

1. Develop basic skills in motivational interviewing;
2. Apply basic fitness and health assessments and screening tools;
3. Design and implement an exercise program for a healthy adult;
4. Design and implement a group exercise session;

HESC1511 will develop the following graduate attributes. These include skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

Graduate Attributes

Students will develop their skills:

1. As collaborative team workers;
2. To be able to apply their knowledge and skills to problem solve;
3. To communicate effectively with patients, colleagues and other health professionals;
4. To display a respect for diversity and a high standard of ethical practice;

Rationale for the Inclusion of Content and Teaching Approach

How the course relates to the Exercise Physiology profession – This course provides students with the basic principles of exercise programming and an understanding of motivation and adherence. These principles underpin your professional requirements for programming physical activity for your clientele.

How the course relates to other courses in the Exercise Physiology program – The course builds on the information gained in Introductory Exercise Science (HESC1501) and Psychology (PSYC1001).

Teaching Strategies

Lectures – Lectures will provide you with the concepts and theory essential for understanding the principals underpinning programming exercise for apparently healthy individuals.

Laboratories – To assist in the development of practical skills and exercise technique practical classes will be held. These classes allow students to engage in a more interactive form of learning than is possible in the lectures. The skills you will learn in practical classes are relevant to your development as professional Exercise Physiologists.

Clinicals – Each student will spend a total of six hours over the semester developing their clinical skills and working towards their major assignment. Six hours (3 x 2 hour sessions) will be spent in the CSEP rooms for their 1) client initial assessment, 2) client training session 3) client post assessment. All 3 sessions are compulsory and are required to complete your assignment.

Tutorials - This format provides a more informal learning environment than a lecture. Small group sessions will be structured to encourage your participation in activities, develop confidence for working with your client, and discussions are designed to enhance your learning. Tutorial information will be uploaded into Moodle. Please come prepared for your tutorial.

Assessment

These tasks have been chosen as tools to enhance and guide your learning as well as a way of measuring performance, and are therefore a central teaching strategy in this course.

<u>Summary of Assessments</u>	<u>Weight</u>	<u>Due Date</u>
1: Diet analysis	10%	Week 6 31 st Aug
2: Exercise Programming Assignment		
Part 1:	15%	Week 8 14 th Sep
Part 2:	25%	Week 13 26 th Oct
3: Group Exercise Assignment	10%	Week 12 19 th Oct
5. Online Tasks	5%	Week 13 26 th Oct
6. Final Exam	35%	Exam period

Assessment Task 1 – Dietary Analysis (10%)

Details:

1. Choose someone to be your client who is willing to undergo a diet analysis. This person can be a friend or family member. It does not have to be someone from the HESC1511 course.
2. Ask your client to record their diet over three days (two weekdays and one weekend day) and have them return this to you.
3. Use a nutritional analysis program (ideally FOODWORKS) to analyse the macronutrient and micronutrient content of the diet.
4. Write a thorough one - two page (maximum) double spaced recommendation for improving their diet.
5. In an appendix include 2-3 relevant Figures from the analysis.

Due Date: 9am Monday 31st August (Week 6) via Turn-It-In on Moodle

Assessment Task 2 – Exercise Programming Assignment (40%)

Part 1 (15%) Due Date: 9am Monday 14th September (Week 8) via Turn-It-In on Moodle

In preparation for your assignment, choose a partner from your clinical group. This person will be your client for this entire assignment. You will need to use your Clinical sessions to perform the screening, interview, training, fitness assessments and evaluation to gather the data for your written report.

In Part 1 of your written report you need to include:

1. Copy of client's completed
 - i. ESSA Pre exercise screening questionnaire (Stage 1)
 - ii. Pre-Screening questionnaire which you designed yourself
2. Summary of findings of your initial interview with your client
3. Your client's SMART short term goals (x3) and long term goal (x1)
4. Summary of results of the Objective fitness test (performed in Clinical 1)
5. Copy of *COMPLETED* training session you designed for your client to undertake in Clinical 2

Part 2 (25%) Due Date: 9am Monday 26th October (Week 13) via Turn-It-In on Moodle

Your final report is due at the beginning of week 13 and will include:

1. Title Page
2. *Screening Forms & Interview Summary
3. Summary of Needs Assessment & *Goals
4. *6 week Exercise Program (including 1 completed exercise session program card* from Clinical 2)

5. 1-2 page justification of exercise program including references/appropriate guidelines, and plan for progression
6. Full report of pre*/post fitness measures (including anthropometry)
7. Client's evaluation of exercise program (max 1 page)
8. Simulated report on client outcome/progress to GP/Other Health Professional
9. 1-2 page critical evaluation of your exercise program (what went well? What might you change for next time?)

*You would have originally submitted these segments in Part 1, you may alter your reports of these based on your assignment feedback when you submit them again in Part 2 if you desire.

Assessment Task 3 – Group Exercise for Populations (10%)

The purpose of this activity is to utilise the principles of exercise programming in a group setting.

1. Choose a population of interest to you that would likely undertake a group exercise session.
2. Design a 1hr exercise session specific for this group (including relevant components for your population eg. warm up, aerobic conditioning, resistance exercise, skills practice, flexibility and cool down).
3. Source a journal article relevant to exercise and your specific population and include it with your submission.
4. Include a 1-2pg (max) double spaced summary of the main findings and how this research is relevant to exercise programming for your chosen population. Include how this information could be relevant in a clinical setting (or a sporting setting).

Due Date: 9am Monday 19th October (Week 12) via Turn-It-In on Moodle

Assessment Task 4 – Online Tasks

5%

There will be 3 online assessments available throughout the course. Specifically, there is an interactive tutorial (2.5%) and 2 short quizzes (1.25% each). They will be available on Moodle from Week 6 and will close on Monday 9am Week 13. Please note grades will be based on performance in the task, not participation.

Complete by: 9am Monday 26th October (Week 12) within Moodle

Assessment Task 5 – Final Exam

40%

(Exam Period)

The purpose of the final exam is to test your understanding of the concepts covered in the **entire course**. Material from lectures, tutorials, laboratories and readings may be assessed. The format will be multiple choice and short answer questions. The exam will be held during the end of session exam period.

Submission of Assessment Tasks

All written assessment tasks must be submitted online via Turn-it-in which can be found on the Moodle website (<https://moodle.telt.unsw.edu.au>). Penalties apply for late submissions.

Penalties for Late Submission of Work

Any extension must be applied for in advance of the due date.

In cases where an extension has **not** been granted, the following penalties will apply:

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

Course Schedule (Semester 2, 2015)

Week	Date	Lecture 1 Wed 12-1pm Wurth LG03	Lecture 2 Thu 9-10am Wurth LG03	Laboratory (As Timetabled) WW CSEP	Tutorial Thu 10-11am 1.Mat 306 2.Mat313 3.Mat125 4.Mat303	Clinical (As Timetabled) CSEP Rooms
1	27 Jul – 2 Aug	Introduction: SOAP and Subjective Screening NVD	What does an EP do? “Start to Finish” BP	1. Screening and Risk Stratification	Subjective Screening NVD, AK, AS, BC	
2	3 Aug – 9 Aug	Objective Assessments NVD	Contraindications to Exercise / Conducting a Fitness Assessment NVD	2. Objective Assessments 1	Needs Assessment and Goal Setting NVD, AK, AS, BC	
3	10 Aug- 16 Aug	Nutrition JT	Nutrition JT	3. Objective Assessments 2	Performing a Diet Analysis NVD, AK, AS, BC	
4	17 Aug- 23 Aug	Exercise and Movement Analysis NVD	Models of Behaviour Change and Counselling Strategies NVD	4. Exercise and Movement Analysis Motivational Interviewing / Needs Assessment and Planning	Compiling an Exercise Management Plan NVD, AK, AS, BC	
5	24 Aug- 30 Aug	Motivational Interviewing NVD	Principles of Exercise Programming NVD	5. Diet analysis WW G06		Stream 1: CSEP Rooms
Diet Analysis (10%) Due 9am Monday 31st August via TurnItIn						
6	31 Aug- 6 Sep	Resistance training 1 AK	Resistance training 2 AK	6. Resistance Training 1		Stream 2: CSEP Rooms
7	7 Sep – 13 Sep	Resistance Training 3 AK	Resistance Training 4 AK	7. Resistance Training 2		Stream 1: CSEP Rooms
Exercise Programming Assignment Pt1 (15%) Due 9am Monday 14th Sep via TurnItIn						
8	14 Sep- 20 Sep	Cardiovascular/Aerobic Training 1 AK	Cardiovascular/Aerobic Training 2 AK	8. Core Training		Stream 2: CSEP Rooms
9	21 Sep- 25 Sep	Cardiovascular/Aerobic Training 3 AK	Cardiovascular/Aerobic Training 4 AK	9. Aerobic Exercise Prescription and Monitoring		
MSB	Mid Semester Break 26th September to 5th October					
10	6 Oct- 11 Oct	Flexibility Training AK	Occupational Health and Safety issues TBA	No Lab this week		
11	12 Oct- 18 Oct	Considerations for Individual versus Group Exercise Prescription NVD	<i>Exercise Prescription for Special Populations</i> NVD	10. Group Exercise		Stream 1: CSEP Rooms
Group Exercise Assignment (10%) Due 9am Monday 19th October via TurnItIn						
12	19 Oct- 25 Oct	Exercise Adherence and Addiction NVD	<i>Exercise Fads and Trends</i> NVD	11. Drop In Session		Stream 2: CSEP Rooms
Exercise Programming Assignment Pt2: (25%) Due 9am Monday 26th October via TurnItIn						
13	26 Oct- 1 Nov					
AK: Dr Andrew Keech (AEP)		NVD: Nancy van Doorn (AEP)		BP: Belinda Parmenter		JT: Jeanette Thom (AEP)
AS: Andrew Saliba (AEP);		NB: Nick Burrows (AEP);		JC: Jessica Chow		MC: Muneeba Chaudry
						BC: Brianna Clifford (AEP);

Learning Resources

See also [Learning Resources](#) on the SoMS website.

Resources for Students / Recommended Text

Griffin, JC (2015) *Client Centered Exercise Prescription, 3rd Ed*, Human Kinetics, Champaign, Ill.

Suggested References

Abernethy, B. Hanrahan, SJ. Kippers, V. Mackinnon, LT. & Pandy, MG. (2013) *The Biophysical Foundations of Human Movement, 3rd ed.*, Palgrave Macmillan, South Yarra.

Dwyer, GB. & Davis, SE. (2013) *ACSM's Health-Related Physical Fitness Assessment Manual*, 4th ed. Lippincott, Williams & Wilkins, Phil.

Kennedy-Armbruster, CA. & Yoke, MM. (2014). *Methods of Group Exercise Instruction*, 3rd ed. Human Kinetics, Campaign, Ill.

McArdle, WD. Katch, FI. & Katch, VL. (2014) *Exercise Physiology: Energy, Nutrition, and Human Performance, 8th ed.*, Lippincott, Williams and Wilkins, Phil.

Norton, K. & Olds T. (eds.) (2007) *Anthropometrica: A textbook of body measurement for sports and health education*. UNSW Press, Sydney.

Attendance Requirements

Attendance at all practical classes is compulsory, and must be recorded in the class roll on the day of the class. 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 nonattendance for other than documented medical or other serious reasons, or unsatisfactory performance, may result in an additional practical assessment, exam or ineligibility to pass the course.

Behaviour in Practical Classes

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

- Punctual arrival is expected.
- Turn-off mobile phones before entering the class (mobile phones must not be used or answered during the class)
- Enclosed shoes are compulsory.

Students will be informed at the start of every practical of any potentially hazardous material or activities and control measures to minimise the risk. Students must follow all control measures outlined by the demonstrator. Students must wear all required personal protective equipment required in the practical and make sure the area and all equipment is left clean and functional. Those who do not adhere to these basic laboratory rules will be marked absent.