



Australia's
Global
University

Faculty of Medicine and Health
School of Health Sciences

HESC1511

Exercise Programs and Behaviour

COURSE OUTLINE

TERM 3, 2021

CONTENTS**PAGE**

HESC1511 COURSE INFORMATION	1
COURSE OBJECTIVES	1
STAFF	1
STUDENT LEARNING OUTCOMES.....	2
COURSE STRUCTURE and TEACHING STRATEGIES	2
RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH.....	3
APPROACH TO LEARNING AND TEACHING	3
ASSESSMENT PROCEDURES	4
Penalties for Late Submission of Assignments.....	7
COURSE EVALUATION AND DEVELOPMENT	8
GENERAL INFORMATION	9
Official Communication	9
Academic Integrity and Plagiarism.....	9
Attendance Requirements	9
Special Consideration	9
Health and Safety.....	9
Student Conduct	10
Student Equity and Diversity Issues	10
Student Support Services	10
Appeal Procedures.....	10
Health and Safety.....	10
COURSE TIMETABLE 2021	11

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)

HESC1511 Course Information

Exercise Programs and Behaviour (HESC1511) is a first 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 supervised exercise sessions for healthy adults.

Credit Points: 6 UOC

Course Pre-requisites:

HESC1501 Introductory Exercise Science

PSYC1001 Psychology 1A

COURSE OBJECTIVES

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

STAFF

Course Convenors:

Nancy van Doorn

Rm 205, Level 2 Wallace Wurth Building West

Email: n.vandoorn@unsw.edu.au

Dr Andrew Keech

Rm 202, Level 2 Wallace Wurth Building West

Email: andrew.keech@unsw.edu.au

Please make an appointment via email.

Tutors: Sam Williams (AEP), Harrison Hansford (AEP), Amy Perram (AEP), Imtiaz Desai (AEP), Ciara Mastrogiovani (AEP)

Program Officer:

Ms Ina Ismail <http://unsw.to/webforms>

Available to help with problems with enrolment and scheduling, and the first point of contact for administrative problems.

Technical Officer:

Mr Balu Daniel d.balu@unsw.edu.au

STUDENT LEARNING OUTCOMES

HESC1511 will develop those attributes that the Faculty of Medicine has identified as important for an Exercise Physiology Graduate to attain. These include: skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

Graduate Attributes

- Develop a thorough understanding of the relationship between physical activity and health.
- Attain competencies in conducting a broad range of exercise-based clinical tests and in delivering lifestyle change programs that use exercise for the primary prevention of disease and the management of chronic disease.
- Attain skills and detailed clinical knowledge relevant to cardiopulmonary, metabolic, musculoskeletal, and neuromuscular rehabilitation.
- Develop advanced problem-solving skills and a capacity for critical thinking.
- Develop an ability to engage in independent and reflective learning for the betterment of professional clinical practice.
- Develop a broad range of communication skills and an ability to work as a member and a leader of a team, with respect for diversity and a high standard of ethical practice.

On completion of this course students should:

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.

COURSE STRUCTURE and TEACHING STRATEGIES

Learning activities include:

- Lectures
 - Live online lectures (Tue 9-10am in Wks 1,3,5,8)
 - Pre-recorded lecture and tutorial 'snacks'
- Labs (Wk 2-5, 7-10): Either Mon 11-1pm, Tue 11-1pm; Wed 9-11am; Wed 11-1pm; Thurs 9-11am; Fri 11-1pm
- Clinicals (Wk 4,5,7,8,9): Either Mon 9-11am, Mon 1-3pm, Tues 1-3pm, Tues 3-5pm, Wed 9-11am, Wed 11-1pm, Wed 3-5pm, Thurs 9-11am, Thurs 11-1pm, Fri 9-11am, Fri 11-1pm, Fri 2-4pm

Students are expected to refer to their timetable for their allocated class times and to the course schedule for the mode of delivery (online link or face-to-face location) of these classes. They should attend all scheduled activities for their full duration. 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 75 hours throughout the trimester and students are expected (and strongly recommended) to do at least the same number of hours of additional study.

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 HESC1501 and PSYC1001.

APPROACH TO LEARNING AND TEACHING

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 to prepare students for future careers.

Lectures – This approach is used to present relatively large amounts of information at a time on specific topics throughout the course. PDF copies of the lecture notes will usually be available on Moodle prior to each lecture (some guest lecturers may choose not to make their notes available), so you should be able to think about and develop an understanding of the lecture concepts as they are presented, rather than writing voluminous notes. However, there will be information and explanations presented in lectures in addition to those covered in the notes that you should take down if they help you to understand the material. The lecturer will also try to allow some time for interaction and activities in each lecture to provide you with an opportunity to clarify or reinforce the ideas that have been presented. You should take these opportunities to think about the information that has been presented and ask questions to enhance your understanding.

Laboratories – To assist in the development of practical skills and exercise techniques, 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 professional development as an Exercise Physiologist.

Clinicals – Each student will spend a total of ten hours during the course developing their clinical skills. These ten hours (5 × 2-hour sessions) will involve: pre-exercise screening, interviewing, goal setting, exercise training sessions and exercise/fitness assessments. All 5 sessions are compulsory. Formative feedback will be provided to you on your competencies (i.e. Clinical skills). Additionally, assessment of your competencies will occur during your later clinicals and constitute Assessment.

Independent study – There is insufficient time in the lectures, tutorials and laboratories for you to develop a deep understanding of the concepts covered in this course. For you to achieve the learning outcomes that will be assessed, you will need to revise the material presented in the course regularly. You will probably also need to do additional reading beyond the lecture materials to learn effectively. Relevant additional resources will be cited in each lecture.

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

ASSESSMENT PROCEDURES

Summary of Assessments	Weight	Due Date
1: Online Moodle Quiz (20 MCQ)	10%	By 5pm Oct 1st
2: Exercise Programming Assignment		
Part 1:	15%	By 5pm Oct 15th
Part 2:	15%	Week 8 Clinical
Part 3:	15%	Week 9 Clinical
3: Group Exercise Assignment	10%	Week 10 (during lab)
4. Final Exam	35%	Exam period

ASSESSMENT TASK 1 – DIET ANALYSIS QUIZ

This quiz opens on Moodle at 9am Mon 27th Sep and closes 5pm on Fri 1st Oct. This is an online multiple-choice quiz that will assess nutrition content in the course. You will be allowed **one** attempt only. You will receive your mark half an hour after the quiz has been closed on Fri 1st Oct.

ASSESSMENT TASK 2 – EXERCISE PROGRAMMING ASSIGNMENT

Part 1 (15%): Initial Screening & Interview

Due by 5pm Oct 15th

In your first clinical (week 4) you would have conducted an initial interview including pre-exercise screening and goals of someone from your clinical class. (This person should remain as your client for the remaining clinicals). **Part 1 of the assignment will be a written submission, uploaded into Turnitin via Moodle.**

You will need to include in your submission:

1. A copy of the client's completed "Pre-Exercise Screening questionnaire" which you designed yourself. Be sure to make it comprehensive.
2. Your client's SMART short-term goals (×3) and long-term goal (×1)
3. Motivational interviewing summary
4. Exercise history

Marking Criteria

Component	How do I achieve top marks?	Mark Allocation (15%)
Pre-Screening Questionnaire	A self-designed, comprehensive, pre-exercise screening questionnaire that covers all components of screening as outlined in the lecture and lab. Logically and neatly presented.	6
Short Term Goals	There are 3 distinct short-term goals listed related to the current exercise program that meet the 'SMART' format.	3
Long Term Goal	There is 1 long term (>6 months) goal listed that meets the 'SMART' format.	1
Motivational interviewing techniques	List examples of "change talk" and/or "sustain talk" that occurred during your interview. In 1-2 sentences, describe how you responded to the change/sustain talk.	2
Exercise History	Provide a comprehensive summary of the client's exercise history (including sporting injury), and their current exercise participation and interests.	3

Part 2 (15%): Training Session (online)
Assessment will occur during the Week 8 Clinical.

Come prepared to Clinical 4 (Week 8) ready to train your client for a 30min session that you have designed. You will be marked on the design of your training session and the delivery of your session.

Preparation for your session:

1. Prior to the clinical be prepared to upload a copy of your client's Training card (that you have designed for them). Make sure your name and Student ID are clearly listed on this card. (Identify your client by their initials). This is for the tutor.
2. During your session you may refer to the program card and any relevant notes relating to the exercises you plan to instruct. You do not need to submit your notes.

Be prepared to justify your training session (i.e., why did you choose the exercises you did).

Marking Criteria

Component	How do I achieve top marks?	Mark Allocation (15%)
Training Card	Client's useful details and goals listed on card. Exercise program arranged in an easy-to-follow format. Design caters to capture any modifications made on the day.	3
Justification	You will be asked the following questions to justify the specifics of your training session: 1. How do today's exercises link to your client's goals and/or needs? 2. Which major reference(s) did you base your training session from (e.g., ACSM/NSCA) 3. Why did you choose this volume for this exercise? (the tutor will choose one exercise from the card) 4. Why did you choose this intensity & rest periods for this exercise? (the tutor will choose one exercise from the card) 5. Why did you order the session in this way?	5
Practical Training session	Student made appropriate safety considerations for client during the training session.	2
	The training session contained appropriate warm up, conditioning and cool down phases.	1
	Student confidently delivered all aspects of the training session	1
	Student developed a good rapport with the client and was able to motivate them.	1
	Training session appeared appropriate and achievable for client considering their individual circumstances and fitness levels.	1
	Training session was well timed to fit into 30mins	1

Part 3 (15%): Competency assessment (online)
Held during your Week 9 clinical.

Competency assessment will occur during your week 9 clinical. You will be assessed on your ability to conduct a follow up consultation. This will include:

1. Your client communication skills
2. Your clinical skills for:
 - a. Exercise assessment
 - b. Interpretation of results
3. Your ability to provide future directions: Based on these results and the Australian physical activity guidelines, explain to your client if they need to modify their current activity levels or not.
 - a. If they do, provide a basic exercise prescription (e.g., increase to 2 resistance training sessions per week; add 1 moderate-vigorous intensity aerobic session)
 - b. If they do not, confirm they are meeting current physical activity guidelines and how this affects their cardiometabolic risk.

Component	How do I achieve top marks?	Mark Allocation (15%)
Competency	Domains assessed: <ul style="list-style-type: none"> • Communication • Procedural skills • Technical skills • Professionalism 	2 3 3 2
Interpretation of Results to your client	Interpretation of results is correct and communicated to the client using reference to their previous result, if available, and/or normative values	2
Future directions	Accurate and appropriate future directions in terms of their physical activity levels are provided to the client.	3

ASSESSMENT TASK 3 – GROUP EXERCISE PRACTICAL ASSESSMENT

Conducted during your Lab session in Week 10

The purpose of this activity is to provide you with an opportunity to practice group exercise instruction. In groups of four (formed from students within your timetabled Lab class), plan an exercise session for a group of apparently healthy, low risk participants from a population of your choice. Work in a group to plan an exercise session that allows each member of the group to lead the instruction for 5 minutes of activities/exercises for the population. A smooth transition between members of your group is ideal.

Your group will be allocated a session time during your Lab class in Week 10. Your group will have 20 mins to run the exercise session (individuals have 5 mins to run their component). Please note: when your group is not presenting, you will play the role of the exercise class group for the other presenters.

Marking Criteria

Component	How do I achieve top marks?	Mark Allocation (10%)
Practical Performance		
Communication	Instruction is clear and able to be understood by the population.	1
	Voice is projected and language is upbeat and engages the population.	1
	A variety of instruction techniques are applied to cater for different types of learners within the class.	2
	Student appeared well prepared and confident.	1
Exercises	Exercises chosen are appropriate for the population.	1
	Exercise demonstration is provided.	1
Group setting	Appropriate modifications or advanced options were given to cater to varying range of ability within the group.	1
	Client and instructor health & safety was considered in the context of telehealth.	1
	Student was able to give adequate feedback to participants for the task and was able to identify and correct those who needed further instruction.	1

ASSESSMENT TASK 4 – FINAL EXAM (35%)

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

Final exam period: 26 November to 9 December 2021

Supplementary exam period: 10 January to 14 January 2022

Penalties for Late Submission of Assignments

In cases where an extension has NOT been granted, the following penalties will apply: For assignments submitted after **9:00am** on the due date, a penalty of 50% of the maximum marks available for that assignment will be incurred. A further 25% of the maximum possible allocated marks (i.e., a total of 75%) will be deducted from assignments which are two (2) days late. Assignments received more than two (2) days after the due date **will not be allocated a mark**, however, these assignments **must** still be submitted to pass the unit.

TEXTBOOKS AND OTHER RESOURCES**Moodle**

Information about the course as well as lecture, tutorial and lab notes can be accessed via the UNSW Moodle system from the following site:

<https://moodle.telt.unsw.edu.au/login/index.php>

You can use Moodle to download lecture notes, access your grades, find reference material in the course (such as this document), and communicate with the lecturer and your peers.

Please see the lecturer if you would like more information to help you to make the most of this resource.

UNSW Library

The University Library provides a range of services to assist students in understanding how to identify what information is required for assignments and projects; how to find the right information to support academic activities; and how to use the right information most effectively. <https://www.library.unsw.edu.au/study/information-resources>

Suggested Reference Textbook

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

Other Suggested Reference Textbooks

American College of Sports Medicine, (2017) *ACSM's Health-Related Physical Fitness Assessment Manual*, 5th ed. Lippincott, Williams & Wilkins, Phil.

Kennedy-Armbruster, CA. & Yoke, MM. (2019). *Methods of Group Exercise Instruction*, 4th ed. Human Kinetics, Champaign, Ill.

McArdle, WD. Katch, FI. & Katch, VL. (2014) *Exercise Physiology: Nutrition, Energy 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.

UNSW Learning Centre

The Learning Centre offers academic skills support to all students across all years of study enrolled at UNSW. This includes assistance to improve writing skills and approaches to teamwork. See www.lc.unsw.edu.au

COURSE EVALUATION AND DEVELOPMENT

Each year feedback is sought from students about the course and continual improvements are made based on this feedback. The myExperience Process of UNSW is the way in which student feedback is evaluated and significant changes to the course will be communicated to subsequent cohorts of students.

Based on the feedback received in recent years, the assessment tasks have been revised to make the experience more practical for students and align well with lecture and laboratory content. We have endeavoured to ensure that lecture and online material falls before laboratories and clinical sessions to ensure students are equipped with the knowledge to better apply themselves in these practical sessions. Furthermore, we have included a quiz in place of a dietary analysis assignment to reduce burden to students and more efficiently cover key content relevant to the Discipline. Clinicals now begin in week 4 to allow students to familiarise themselves with the course and skills required to manage a healthy client.

GENERAL INFORMATION

Official Communication

All communication will be via your official UNSW email, please see [Advice for Student-Official Communication](#) for more details.

Academic Integrity and Plagiarism

Plagiarism is using the words or ideas of others and presenting them as your own. Plagiarism is a type of intellectual theft and is regarded by the university as academic misconduct. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. The University has adopted an educative approach to plagiarism and has developed a range of resources to support students.

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](#)

Attendance Requirements

Attendance is compulsory at all clinicals, labs, and examinations for this course. Attendance at all labs will be recorded. Students who do not participate in these sessions for any reason other than medical or misadventure, will be marked absent and may be awarded a grade of FAIL for the entire course. If absent for medical reasons, a medical certificate must be lodged with the lecturer within 7 days of the time of the certificate's expiry. No consideration will be given after this time except for truly exceptional circumstances. Arrival more than 15 minutes after the start of the class will be recorded as non-attendance. Although lecture recordings will be available, student participation is encouraged in the lectures, and these are important to attend.

For additional details on the UNSW Policy on Class Attendance and Absence see [Policy on Class Attendance and Absence](#).

Special Consideration

Please see [UNSW-Special Consideration](#)

If you believe that your performance in a course, either during session or in an examination, has been adversely affected by sickness, misadventure, or other circumstances beyond your control, you can apply for special consideration online.

If your request for consideration is granted an alternative assessment will be organised which may take the form of a supplementary exam, increased weighting of the final exam, or an oral element. You cannot assume you will be granted supplementary assessment.

For the UNSW assessment information and policy, see:

<https://my.unsw.edu.au/student/academiclife/assessment/AssessmentPolicyNew.html>

<https://student.unsw.edu.au/assessment>

Health and Safety

Class activities must comply with the NSW *Work Health and Safety Act 2011*, the *Work Health and Safety Regulation 2017*, and other relevant legislation and industry standards. It is expected that students will conduct themselves in an appropriate and responsible manner

in order not to breach HS regulations and ensure a safe work/study environment for themselves and others. Further information on relevant HS policies and expectations is outlined at: www.safety.unsw.edu.au

Student Conduct

All students must accept their shared responsibility for maintaining a safe, harmonious, and tolerant University environment. For further information see www.student.unsw.edu.au/conduct

Student Equity and Diversity Issues

Students requiring assistance are encouraged to discuss their needs with the course convenor prior, or at the commencement of the course, or with staff in the Equitable Learning Services (<https://student.unsw.edu.au/els>).

Student Support Services

Details of the available student support services can be found at [Student Support and Success](#).

Details of counselling support services can be found at [Counselling and Psychological Services](#).

Appeal Procedures

Details can be found at [Student Complaints and Appeals](#)

Health and Safety

Class activities must comply with the NSW *Work Health and Safety Act 2011*, the *Work Health and Safety Regulation 2017*, and other relevant legislation and industry standards. It is expected that students will conduct themselves in an appropriate and responsible manner in order not to breach HS regulations and ensure a safe work/study environment for themselves and others. Further information on relevant HS policies and expectations is outlined at: www.safety.unsw.edu.au

COURSE TIMETABLE 2021

Wk	Date	Lectures Tuesday 9-10am Live Online	Lecture Snacks Pre-recorded online mini-lectures and tutorials	Labs Wk 1-5: Online Wk 7-10: Lab Mon 11-1, Tues 11-1, Wed 9-11, Wed 11-1, Thurs 9-11, Fri 11-1	Clinicals All Online Mon 9-11, Mon 1-3, Tues 1-3, Tues 3-5, Wed 9-11, Wed 11-1, Wed 3-5, Thurs 9-11, Thurs 11-1, Fri 9-11, Fri 11-1, Fri 2-4	Assessments
1	13 th Sept	1.1 Course Intro / Being an AEP AK/NVD	1.2 Nutrition (parts 1-7) EJ 1.3 Diet Analysis MJ/NVD 1.4 SOAP & subjective screening MJ 1.5 Screening MJ			
2	20 th Sept		2.1 Fitness Assessments AK 2.2 Behaviour Change & Motivational Interviewing NVD 2.3 Needs Assessment NVD 2.4 SMART Goals (video) NVD	1. Screening / Assessments (body composition; posture)		
3	27 th Sept	3.1 Principles of Exercise Programming NVD	3.2 Contraindications to Exercise / Conducting Fitness Assessment NVD 3.3 FIIT MJ 3.4 Movement Analysis Revision	2. Motivational Interviewing		Online Quiz - Nutrition (10%) opens 9am 27 th Sep, closes 5pm 1 st Oct
4	4 th Oct		4.1 Resistance Training – Adaptations AK 4.2 Resistance Training – Preparation AK 4.3 Resistance Training – Programming AK	3. Fitness Assessments (online)	1: Initial Interview & Screening	
5	11 th Oct	5.1 Aerobic Training Programming AK	5.2 Aerobic Training Adaptations MJ 5.3 Flexibility Training AK	4. Exercise Training (online)	2: Fitness Assessments	Part 1. Ex Prog Assignment (15%) due 5pm 15 th Oct
7	25 th Oct			5. Fitness Assessments (lab)	3: Exercise Training	
8	1 st Nov	8.1 Individual vs. Group Exercise Prescription / Competency practice NVD	8.2 Exercise Prescription for Selected Populations NVD	6. Exercise Training (lab)	4: Exercise Training Assessment	Part 2. Ex Prog Assignment (15%) assessed during Wk 8 Clinical
9	8 th Nov		9.1 Exercise Adherence and Addiction NVD 9.2 Overtraining & Extreme Exercise AK	7. Group Exercise Instruction Preparation	5: Competencies Assessment	Part 3. Ex Prog Assignment (15%) assessed during Wk 9 Clinical
10	15 th Nov			8. Group Exercise Instruction Assessment		Group Ex Instruction Assessment (10%) assessed during Wk 10 Lab

Lecturers: Nancy van Doorn (NvD), Dr Andrew Keech (AK), Dr Matthew Jones (MJ), Emma Jones (EJ, nutritionist)