COURSE OUTLINE

NUT310 Advanced Sports Nutrition

School: School of Health - Nutrition and Dietetics

2026 | Semester 2

UniSC Sunshine Coast	BLENDED LEARNING	Most of your course is on campus but you may be able to do some components of this course online.

Please go to unisc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

Advanced sports nutrition is an advanced level course that provides you with an understanding of the key principles of sports nutrition and its practical application to both active lifestyle/recreational individuals and competitive athletes. The course builds upon knowledge and skills acquired in NUT203 Active Lifestyle Nutrition. You will learn about the impact of training and competition on energy and macronutrient, micronutrient needs, fluid requirements and supplement guidance according to specific sporting groups. You will be required to examine the role of nutrition for individuals in terms of enhancing exercise performance, while also addressing the requirements for overall health.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Tutorial/Workshop 1 – On campus	2hrs	Week 1	13 times
Learning materials – Online pre-learning tasks delivered in pre-recorded video format, focused on delivery of key theory	2hrs	Throughout teaching period (refer to Format)	13 times

1.3. Course Topics

Influence of training and competition on exercise metabolism and thus energy, protein, fat, carbohydrate and fluid requirements of athletes; sports supplement industry and frameworks for classification of supplement use and associated issues relating to the integrity of sport; application of sports nutrition principles to specific life stages and sporting populations, including combat sports, endurance (gravitational and non-gravitational) sports, combat (and other weight category) sports, plus strength and power sports; nutrition in environmental extremes.

2. What level is this course?

300 Level (Graduate)

Demonstrating coherence and breadth or depth of knowledge and skills. Independent application of knowledge and skills in unfamiliar contexts. Meeting professional requirements and AQF descriptors for the degree. May require pre-requisites where discipline specific introductory or developing knowledge or skills is necessary. Normally undertaken in the third or fourth full-time study year of an undergraduate program.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES On successful completion of this course, you should be able to...		GRADUATE QUALITIES Completing these tasks successfully will contribute to you becoming...
1	Demonstrates a broad and coherant theoretical knowledge of the principles of sports nutrition to analyse and interpret nutritional assessment data as it relates to the needs of a specific sport	Knowledgeable Creative and critical thinker
2	Critically evaluates literature and data to apply an evidence-based approach to formulate nutrition goals and a nutrition intervention plan for an athlete that is client-centred	Knowledgeable
3	Demonstrates a thorough knowledge of the impact of variance in training type and load on exercise metabolism and needs for energy, protein, fat, carbohydrate and fluid across a wide range of sport activities	Knowledgeable
4	Demonstrate an ethical and professional approach to practice	Ethical
5	Demonstrates critical thinking and professional judgement to construct a nutrition intervention plan (within scope of practice) for an athlete in relation to best practice	Creative and critical thinker Ethical
6	Critically reflect on practice and recognise professional scope of practice	Creative and critical thinker Ethical

5. Am I eligible to enrol in this course?

Refer to the UniSC Glossary of terms for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

NUT300 (or NUT203)

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

SPX352 and NUT309

5.4. Specific assumed prior knowledge and skills (where applicable)

It is expected that students will have a general understanding of nutrition as it applies to health and performance amongst active lifestyle participants.

5.5. Microcredential Information

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

In week 3 of this course, an evaluation of a specific supplement for an athlete will be submitted via Canvas. Furthermore, a formative summary of your search strategy of the evidence related to a specific sports nutrition topic will be required in week 3.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WEIGHTING %	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Report	Individual	20%	500 words (excluding tables)	Week 3	Online Assignment Submission with plagiarism check
All	2	Report	Individual	30%	1500 words	Week 10	Online Submission
All	3	Examination - Centrally Scheduled	Individual	50%	120 mins	Exam Period	Online Test (Quiz)

All - Assessment Task 1: Dietary analysis

GOAL:	The goal of this task is to apply principles of sports nutrition to analyse and interpret nutrition assessment and body composition data of an athlete.
PRODUCT:	Report
AUTHORSHIP STATEMENT:	
FORMAT:	You will be provided with a real-life athlete seeking dietary advice. You will be required to identify the food groups, number of serves per food group, and sources of key micro- and macronutrients within foods in the diet and compare this to the Australian dietary guidelines for active individuals. You will submit this dietary analysis (using the template provided) online at the end of week 3.
CRITERIA:	**No.** — **Learning Outcome assessed** 1 Evaluate and interpret dietary intake data — 1
GENERIC SKILLS:	Problem solving, Information literacy

All - Assessment Task 2: Report - Nutrition Intervention Plan

GOAL:	The goal of this task is to apply principles of sports nutrition to analyse and interpret nutrition assessment and body composition data of an athlete and formulate dietary recommendations and a meal plan that is evidence-based and meets specific needs of the individual sport.
PRODUCT:	Report
AUTHORSHIP STATEMENT:	
FORMAT:	You are to interpret the implications of the dietary analysis from Task 1, plus other relevant information (training, body composition etc.), and provide guidance to the athlete that will assist in achieving their specified goals. You will submit electronically the nutrition intervention plan report (using the template provided) of 1500 words. You will include in this report the following information: dietary assessment of the individual, nutrition goals, dietary guidance specific to the individual, and justification for your nutrition intervention plan.
CRITERIA:	

No.		Learning Outcome assessed
1	Correctly evaluate and interpret dietary intake, physical activity data and body composition data	1
2	Formulate key nutritional priorities and goals	2 5 6
3	Create an intervention which aligns nutrition guidelines and is client centred. Use critical thinking and integrate evidence to justify nutrition intervention plans	3 4 5 6
4	Use credible, relevant and high quality references appropriately and according to scientific report writing conventions	5
5	Communicate in written form consistent with a professional report	5

GENERIC SKILLS:	

All - Assessment Task 3: Exam

GOAL:	The goal of this task is to demonstrate your understanding of how training type and load influences energy, macro and micronutrient needs plus fluid requirements of athletes across a range of sports develop and deliver a workshop on sports nutrition requirements relevant to a specific sport
PRODUCT:	Examination - Centrally Scheduled
AUTHORSHIP STATEMENT:	
FORMAT:	A 120 minute final exam that will assess knowledge of content taught in this course in workshops and online activities. This exam will evaluate knowledge of the impact of variance in training types and load on exercise metabolism, and thus energy, protein, fat, carbohydrate and fluid needs of athletes.
CRITERIA:	

No.		Learning Outcome assessed
1	Application of the knowledge of advanced sports nutrition principles in the recommendations of dietary advice	1 2
2	Evaluation of data	2

GENERIC SKILLS:	

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

7.1. Schedule

PERIOD AND TOPIC	ACTIVITIES
1	Introduction: Exercise metabolism, and the implications of training prescription on energy needs and dietary guidance
2	Carbohydrate needs of athletes
3	Protein needs of athletes. Class discussion and feedback of Assessment task 1a
4	Fluid needs of athletes
5	Body mass management of athletes
6	Sports Supplements
7	Sport Specific Nutrition - Endurance Sport (non-gravitational)
8	Sport Specific Nutrition - Endurance Sport (gravitational)
9	Sport Specific Nutrition - Team Sport
10	Sport Specific Nutrition - Strength and Power Sport
11	Sport Specific Nutrition – Combat Sport
12	Special populations & environments
13	Self-directed

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

You need regular access to the resource(s) below. Many texts are available as ebooks through the Library at no additional cost.

REQUIRED?	AUTHOR	YEAR	TITLE	EDITION	PUBLISHER
Recommended	Jeukendrup, Asker,Gleeson, Michael	2018	Sport Nutrition-3rd Edition	n/a	Human Kinetics

8.2. Specific requirements

Nil

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the online induction training for students, and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment Your eligibility for supplementary assessment in a course is dependent on the following conditions applying: The final mark is in the percentage range 47% to 49.4% The course is graded using the Standard Grading scale You have not failed an assessment task in the course due to academic misconduct

10.3. Assessment: Submission penalties

Late submission of assessment tasks may be penalised at the following maximum rate: - 5% (of the assessment task's identified value) per day for the first two days from the date identified as the due date for the assessment task. - 10% (of the assessment task's identified value) for the third day - 20% (of the assessment task's identified value) for the fourth day and subsequent days up to and including seven days from the date identified as the due date for the assessment task. - A result of zero is awarded for an assessment task submitted after seven days from the date identified as the due date for the assessment task. Weekdays and weekends are included in the calculation of days late. To request an extension you must contact your course coordinator to negotiate an outcome.

10.4. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching

10.5. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The Student Charter sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.6. General Enquiries

In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au