

NUT309 Sport and Exercise Nutrition

School: School of Health - Nutrition and Dietetics

2025 | Session 3

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 usc.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

Sport and Exercise Nutrition provides an understanding of the key principles of sports nutrition and its practical application across individuals, from those following an active lifestyle to competitive athletes. You will learn about the impact of training and competition on exercise metabolism and thus energy and macronutrients, micronutrient needs, and fluid requirements. Overall, you will develop competencies in understanding the role of nutrition for individuals in 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			
Learning materials – Series of pre-recorded videos	2hrs	Week 1	8 times
Tutorial/Workshop 1 – Face-to-face workshop applying theory addressed in online video recordings	2hrs	Week 1	8 times

1.3. Course Topics

- Introduction: Exercise metabolism, and the implications of training prescription on macro and micronutrient needs. Energy need of active individuals
- The Fuels of exercise: Carbohydrate and fat... friend or foe
- Protein needs of athletes: Beyond the RDI
- Fluid needs of athletes:
- Body mass management of athletes... PROs and CONs
- Sports Supplements: managing the risk
- Special populations and environments

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?

6 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES		GRADUATE QUALITIES
On successful completion of this course, you should be able to...		Completing these tasks successfully will contribute to you becoming...
1	Describe and evaluate 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
2	Appraise nutrition assessment information using the principles of sports nutrition as it relates to the needs of a specific sport.	Creative and critical thinker
3	Applies a critical thinking approach and clinical judgment in the formulation of a nutrition intervention plan.	Creative and critical thinker
4	Create an athlete-centred nutrition intervention based on the best evidence in a culturally safe and responsive way.	Creative and critical thinker Empowered Sustainability-focussed

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

NUT202 and NUT212 and enrolled in Program SC302 or SC406

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

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

You are expected to understand the role and function of nutrients, nutritional requirements including deficiency and toxicity, food sources of nutrients and special nutrient needs of people across the lifespan.

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 2 of Session 3 you will be required to provide an overview of key issues at hand for peer review. Feedback will be provided at a group level to ensure key issues are identified for subsequent implementation in the remainder of the case study.

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	1a	Case Study	Individual	0%	Table	Week 2	In Class
All	1b	Case Study	Individual	50%	1500 words	Week 6	Online Assignment Submission with plagiarism check
All	2	Examination - not Centrally Scheduled	Individual	50%	2 hours	Week 8	In Class

All - Assessment Task 1a: 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.								
PRODUCT:	Case Study								
FORMAT:	This assessment task requires qualitative and quantitative analysis of a meal plan. You will be given a case scenario related to an athlete from a specific sport. You will analyse the dietary intake of this individual athlete in comparison to nutrient standards and nutrition guidelines relevant to the specific sport. You will submit your dietary analysis on Friday, week 2 for formative (ungraded) feedback. You will use the template provided. This feedback will assist you to complete your final nutrition intervention plan report i.e. Assessment Task 1b.								
CRITERIA:	<table><tr><th>No.</th><th></th><th>Learning Outcome assessed</th></tr><tr><td>1</td><td>Analyse and interpret nutrition assessment data using relevant nutrition standards</td><td>2</td></tr></table>			No.		Learning Outcome assessed	1	Analyse and interpret nutrition assessment data using relevant nutrition standards	2
No.		Learning Outcome assessed							
1	Analyse and interpret nutrition assessment data using relevant nutrition standards	2							
GENERIC SKILLS:	Communication, Problem solving, Information literacy								

All - Assessment Task 1b: 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 are evidence-based and meet their individual sport-specific needs.																			
PRODUCT:	Case Study																			
FORMAT:	<p>You will be given a case scenario related to an athlete from a specific sport. You will analyse the dietary intake of this individual athlete in comparison to nutrient standards and nutrition guidelines relevant to the specific sport i.e. Assessment Task 1a.</p> <p>You will submit the following documents electronically through Canvas assignment on Friday, week 6.</p> <p>Dietary Analysis template (using the template provided)</p> <p>Nutrition Intervention Plan report of 1500 words. You will include in this report the following information:</p> <p>Dietary assessment of the individual</p> <p>Nutritional goals</p> <p>Meal plan specific to the individual</p> <p>Justification of your nutrition intervention plan</p>																			
CRITERIA:	<table> <thead> <tr> <th>No.</th><th></th><th>Learning Outcome assessed</th></tr> </thead> <tbody> <tr> <td>1</td><td>Critically evaluate and analyse nutrition assessment information in a given scenario.</td><td>3</td></tr> <tr> <td>2</td><td>Accurate identification, formulation and prioritisation of nutrition goals.</td><td>3</td></tr> <tr> <td>3</td><td>Formulate a meal plan that is athlete-centred and evidence-based.</td><td>3</td></tr> <tr> <td>4</td><td>Expresses clearly reasoned viewpoints that is logical and supported with credible evidence.</td><td>4</td></tr> <tr> <td>5</td><td>Communicate in a written form consistent with a professional report</td><td>3</td></tr> </tbody> </table>	No.		Learning Outcome assessed	1	Critically evaluate and analyse nutrition assessment information in a given scenario.	3	2	Accurate identification, formulation and prioritisation of nutrition goals.	3	3	Formulate a meal plan that is athlete-centred and evidence-based.	3	4	Expresses clearly reasoned viewpoints that is logical and supported with credible evidence.	4	5	Communicate in a written form consistent with a professional report	3	
No.		Learning Outcome assessed																		
1	Critically evaluate and analyse nutrition assessment information in a given scenario.	3																		
2	Accurate identification, formulation and prioritisation of nutrition goals.	3																		
3	Formulate a meal plan that is athlete-centred and evidence-based.	3																		
4	Expresses clearly reasoned viewpoints that is logical and supported with credible evidence.	4																		
5	Communicate in a written form consistent with a professional report	3																		
GENERIC SKILLS:	Communication, Problem solving, Information literacy																			

All - Assessment Task 2: 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.																
PRODUCT:	Examination - not Centrally Scheduled																
FORMAT:	A 2 hr final exam that will assess knowledge of the content taught in this course in learning materials, workshops and online activities. This exam will evaluate the following: Application of 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:	<table> <thead> <tr> <th>No.</th><th></th><th>Learning Outcome assessed</th></tr> </thead> <tbody> <tr> <td>1</td><td>Illustrate the impact of training type and intensity on exercise metabolism and subsequent nutrient needs</td><td>1</td></tr> <tr> <td>2</td><td>Demonstrate ability to apply general sports nutrition guidelines to specific needs individual athletes</td><td>2</td></tr> <tr> <td>3</td><td>Demonstrate the ability to evaluate and interpret relevant nutrition assessment data to guide evidence-based nutrition care for individual athletes.</td><td>2</td></tr> <tr> <td>4</td><td>Demonstrates the ability to evaluate the efficacy of any subsequent interventions.</td><td>3</td></tr> </tbody> </table>	No.		Learning Outcome assessed	1	Illustrate the impact of training type and intensity on exercise metabolism and subsequent nutrient needs	1	2	Demonstrate ability to apply general sports nutrition guidelines to specific needs individual athletes	2	3	Demonstrate the ability to evaluate and interpret relevant nutrition assessment data to guide evidence-based nutrition care for individual athletes.	2	4	Demonstrates the ability to evaluate the efficacy of any subsequent interventions.	3	
No.		Learning Outcome assessed															
1	Illustrate the impact of training type and intensity on exercise metabolism and subsequent nutrient needs	1															
2	Demonstrate ability to apply general sports nutrition guidelines to specific needs individual athletes	2															
3	Demonstrate the ability to evaluate and interpret relevant nutrition assessment data to guide evidence-based nutrition care for individual athletes.	2															
4	Demonstrates the ability to evaluate the efficacy of any subsequent interventions.	3															
GENERIC SKILLS:	Communication, Applying technologies, Information literacy																

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.

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

There are no required/recommended resources for this course.

8.2. Specific requirements

Not applicable

9. How are risks managed in this course?

Risk assessments have been performed for all studio and laboratory classes and a low level of health and safety risk exists. Some risk concerns may include equipment, instruments, and tools; as well as manual handling items within the laboratory. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the 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 of the following conditions applying:

- (a) The final mark is in the percentage range 47% to 49.4%; and
- (b) The course is graded using the Standard Grading scale

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

Less than 15 minutes: No penalty

From 15 minutes to 30 minutes: 20% penalty

More than 30 minutes: 100% penalty

10.4. SafeUniSC

UniSC is committed to a culture of respect and providing a safe and supportive environment for all members of our community. For immediate assistance on campus contact SafeUniSC by phone: [07 5430 1168](tel:0754301168) or using the [SafeZone](#) app. For general enquires contact the SafeUniSC team by phone [07 5456 3864](tel:0754563864) or email safe@usc.edu.au.

The SafeUniSC Specialist Service is a Student Wellbeing service that provides free and confidential support to students who may have experienced or observed behaviour that could cause fear, offence or trauma. To contact the service call [07 5430 1226](tel:0754301226) or email studentwellbeing@usc.edu.au.

10.5. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the [Learning Advisers](#) web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.6. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to [Student Hub](#), email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.7. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, [AccessAbility Services](#) can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to [Student Hub](#), email AccessAbility@usc.edu.au or call 07 5430 2890.

10.8. 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>

10.9. 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.

10.10. 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