ENDEAVOUR College of Natural Health

SUBJECT OUTLINE

Subject Name:

Sports Nutrition

Subject Code:

NMDS311

SECTION 1 – GENERAL INFORMATION

Award/s:		**Total Course Credit Points:**	**Level:**	
	Bachelor of Health Science (Naturopathy)	128	Elective	4th Year
	Bachelor of Health Science (Nutritional and Dietetic Medicine)	96	Core	3rd Year
Duration:	1 Semester			
Subject is:	Core or Elective as noted	**Subject Credit Points:**	2	

Student Workload:

No. timetabled hours per week: 3	**No. personal study hours per week: 2**	**Total hours per week: 5**

Delivery Mode*:

☐ **On campus** ☒ **Online / Digital** ☐ **Blended** ☒ **Intensive**

Weekly Session^ Format/s - 1 session per week:

☒ Livestream lectures:	☐ 2 hours	☒ 3 hours	1 x 3 hour lecture/tutorial per week

*All modes are supported by the online learning management system which will include subject documents such as handouts, readings, assessment guides and elearning support modules.

^A 'session' is made up of 3 hours of timetabled / online study time per week unless otherwise specified. Each subject has a set number of sessions as outlined above.

Note: As they are aware, international students on a Student Visa (500) must attend livestream classes on their local campus, using the Virtual Classrooms provided.

Study Pattern:	☒ Full Time ☒ Part Time
Pre-requisites:	NMDF121
Co-requisites:	Nil

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

This subject introduces students to the specific nutritional requirements for athletes with emphasis placed on the practical application of sports nutrition guidelines and practices. Students will critically evaluate the science and practice of sports nutrition and review the principles and research underpinning current recommendations. Sports-related nutritional deficiencies and eating behaviours will be discussed. Students will explore current and emerging sports nutrition dietary information and apply this learning to the development of dietary programs for optimal nutritional health in specific sports and populations of athletes.

Learning Outcomes

1. Identify the key nutrients, their source and quantity required to support athletes in the maintenance of optimal performance and health.
2. Describe the practices and processes involved in the nutritional assessment of athletes.
3. Apply nutritional case management principles to athletes, including special athletic populations
4. Critically evaluate current literature for the evidence-based nutritional support of athletes. ..

Assessment Tasks

Type	Learning Outcomes Assessed	Session Content Delivered	Due	Weighting
Mid-semester Written Exam Case-based (1.5 hours)	1-3	1-6	Week 7	45%
Case Study Report (2000 words)	1- 4	1- 13	Week 14	55%

All written assessments and online quizzes are due at 11:55 p.m. Sunday and submitted through the LMS.

To achieve a passing grade in this subject, students must:

- have a cumulative mark of at least 50%, and
- have submitted all assessment items with a value greater than 15%.

Prescribed Readings:

Burke, L., & Deakin, V. (2015). *Clinical sports nutrition* (5th ed.). McGraw Hill. [ebook available]

Recommended Readings:

Belski, L, Forsyth, A & Mantzioris, E. (2019). *Nutrition for Sport, Exercise and Performance: A practical guide for students, sports enthusiasts and professionals.* Allen & Unwin. [ebook available]

Jeukendrup, A & Gleeson, M. (2018). *Sports Nutrition* (3rd ed.). Human Kinetics Publishers

Resources:

Australian Institute of Sport. (n.d.). *Nutrition.* https://www.ais.gov.au/nutrition

Sports Dietitians Australia. (n.d.). *Fact Sheets* https://www.sportsdietitians.com.au/factsheets/

Subject Content

Week	Lectures	Tutorial and Self-study Activities
1.	**Introduction** (Subject Outline / Subject Aims / Assessment / Teaching Resources) **Exercise fuel and physiology** • Physiological bases of exercise • Exercise metabolism • Training adaptation principles • Skeletal muscle • Exercise intensity on muscle fuel utilisation	Activities are developed to allow the students to explore relevant concepts, expand on ideas and have peer and lecturer interaction. Activities also allow for formative assessment and feedback. Activities can include the following: • Readings • Videos • Case studies • Practical exercises such as meal planning • Review questions Students may be encouraged to work independently or in groups
2.	**Body Composition and Nutrition Assessment** • Body composition assessment methods • Application and limitations of methods • Measuring nutritional status	
3.	**Carbohydrates** • Requirements • Sources and types	
4.	**Protein and Fats** • Requirements • Sources and types	
5.	**Endurance Sports** • Requirements • Training nutrition • Competition nutrition • Injury nutrition	
6.	**Power and Team Sports** • Requirements • Training nutrition • Competition nutrition • Injury nutrition	
7.	**Hydration and Electrolytes** • Requirements • Assessment • Electrolytes • Fatigue • Cramps and stitches • Supplements	

	NON-TEACHING WEEK (note that make-up classes may be scheduled in this week) **Semester 1** – This aligns with the week after Easter so it may fall between Weeks 6 to 8 **Semester 2 & Online students** – The non-teaching week falls between Weeks 7 and 8	
8.	**Weight / Muscle Gain for Sport** • Protein and energy requirements • Challenges and barriers • Weight/muscle gain methods • Skeletal muscle protein metabolism BCAA	• As above
9.	**Weight Making Practices in Sports** • Energy metabolism during exercise • Benefits and risks of weight loss • Challenges and barriers • Weight / fat loss methods	
10.	**Diets for Special Athletic Populations - Part 1** • Vegetarian diets • Gluten free diets • Diabetes and sports nutrition	
11.	**Diets for Special Athletic Populations - Part 2** • Disordered eating in athletes • Female athlete triad • Over training syndrome	
12.	**Supplements** • Australian Institute of Sport (AIS) sport supplement program • AIS anti-doping policy • How supplements should be used • Deficiency in athletes • Antioxidants and vitamins • Key evidence based supplements and doses • Common supplements • Injury supplements • Supplements for junior athletes	
13.	**Travelling Athlete** • Preparing for travel • Resources for athletes • Catering for athletes	
14.	**Non-Teaching Week/Practical Examination Week 1** Note that make-up classes may be scheduled in this week	

15.	**Non-Teaching Week/Practical Examination Week 2** Note that make-up classes may be scheduled in this week
16 - 17.	**Final Examination Weeks 1 & 2** There is no final written exam for this subject