School of Environmental and Life Sciences

FSHN3020: Nutrition in Health and Disease

Ourimbah

Semester 1 - 2024

COURSE OUTLINE

OVERVIEW

Course Description

Nutrition is a key factor that can reduce disease burdens and optimise health outcomes – with benefits for individuals and society. In this course students will explore the evidence base for the role nutrition plays in health status, and the prevention and management of major chronic and acute diseases. By the end of this course students will be able to apply and critique a variety of information relevant to the relationships between nutrition, health and disease; this will include methodologies, evidence and interactions with other factors influencing nutrition, health and disease outcomes. This will prepare students to engage with various stakeholders in nutrition, health and disease including health, government and public health sectors, and the food industry.

Academic Progress Requirements

Nil

Assumed Knowledge

BIOL2011
FSHN1020
FSHN2010

Contact Hours

Ourimbah
Lecture
Face to Face On Campus
2 hour(s) per week(s) for 13 week(s) starting Week 1

Tutorial
Face to Face On Campus
2 hour(s) per week(s) for 13 week(s) starting Week 1

Unit Weighting

10

Workload

Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

CONTACTS

Course Coordinator

Ourimbah
A/Prof. Quan Vuong
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Consultation: By appointment

Joint Coordinator / Teaching Staff

Dr Nienke De Vileger
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Consultation: By appointment

Other teaching staff will be advised on the course Canvas site.

School Office

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SYLLABUS

Course Content

1. Nutrition, dietary and health assessment methodology
2. The relationship between diet, nutrition and disease – study types and interpreting evidence.
3. Genetic influence on nutritional health.
4. The role of diet and nutrition in the Prevention and Management of major diseases.

Course Learning Outcomes

On successful completion of this course, students will be able to:

1. Apply dietary, energy and physical assessment methodologies;
2. Evaluate evidence for the relationship between diet, nutrition and disease;
3. Explain the role of genetics in diet-related diseases and disease susceptibility;
4. Synthesise, interpret and communicate information on interactions between diet, nutrition and other key determinants of health in the aetiology, prevention and treatment of key diseases;

SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
1	26 Feb	Module 1 Methodology - diet, nutrition & health status assessment	Case studies of dietary assessment - Individuals and populations - interpreting & working with data	
2	4 Mar	Module 1 Methodology - diet, nutrition & health status assessment	Nutrition assessment tools & case studies Health status assessment - types and errors	
3	11 Mar	Module 2: Evidence for the relationship between nutrition, health & disease	Intro to Scientific Methods & Levels & Types of Evidence Guidelines vs headlines, evidence & discourse	
4	18 Mar	Module 2: Evidence for the relationship between nutrition, health & disease	Nutritional Epidemiology Epidemiological evidence case studies	CASE STUDY - 20%
5	25 Mar	Module 2: Evidence for the relationship between nutrition, health & disease	Nutrition Interventions Nutrition interventions & the body of knowledge	
6	1 Apr	Module 3: Nutrition in disease prevention & management	DOHAD and life exposures	
7	8 Apr	Module 3: Nutrition in disease prevention & management	Nutrition in disease prevention - national guidelines AGHE, ADGs, NRVs and chronic disease.	
Mid-Semester Recess				
Mid-Semester Recess				
8	29 Apr	Module 3: Nutrition in disease prevention & management	Diet as treatment/intervention for disease I Therapeutic diets - case studies & evidence	REPORT - 20%
9	6 May	Module 3: Nutrition in disease prevention & management	Diet as treatment/intervention for disease Fad diets & weight loss.	
10	13 May	Module 3: Nutrition in disease prevention & management	Nutrition in Health & Disease - societal context Public health & communication	
11	20 May	Module 4: Nutrition and interactions in health and disease	Co-morbidities, medications and environmental exposure interactions - case studies & evidence	
12	27 May	Module 4: Nutrition and interactions in health and disease	Nutrigenetics, Nutrigenomics & Nutritional Epigenetics	PROJECT - 30%
13	3 Jun			
Examination Period				
Examination Period				

ASSESSMENTS

This course has 5 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Online Quizzes	N.A.	Individual	Formative	3, 4
2	Formal Examination	Official exam period	Individual	30%	3, 4
3	Written Report	Friday week 8, 5pm	Individual	20%	2, 4
4	Nutrition Information Resource	Friday week 12, 5pm.	Individual	30%	2, 3, 4
5	Case Study	Friday week 4, 5pm.	Individual	20%	1, 4

Late Submissions The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

Assessment 1 - Online Quizzes

Assessment Type Quiz
Purpose To provide self-assessment throughout semester
Description Provided throughout semester
Weighting This is a formative assessment.
Due Date N.A.
Submission Method Online
Assessment Criteria Formative only
Return Method Online
Feedback Provided Online - Correct and incorrect answers returned immediately upon completion.
Opportunity to Reattempt Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 2 - Formal Examination

Assessment Type Formal Examination
Description Written exam to test the individual student's knowledge of the course material and their ability to analyse questions and to describe and synthesise answers from this material. This exam will be open book.
Weighting 30%
Length 2 hours
Due Date Official exam period
Submission Method Online
Assessment Criteria Marking guide will be imbedded. More details on the exam will be provided prior to week 10.
Return Method Not Returned
Feedback Provided No Feedback
Opportunity to Reattempt Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 3 - Written Report

Assessment Type Report
Description Students will be provided with 3 academic research papers investigating the same relationship between diet, nutrition and disease. They will evaluate the evidence for the relationship presented in each paper, and present their conclusions about the evidence, taking into account the different types of studies used.
Weighting 20%
Due Date Friday week 8, 5pm
Submission Method Online
Assessment Criteria Marking rubric will be provided via Canvas prior to week 4.
Return Method Online
Feedback Provided Online - Within 3 weeks of submission. Individual feedback sheet/rubric provided..

Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 4 - Nutrition Information Resource

Assessment Type	Project
Description	Students will create an information resource to communicate the relationship between nutrition and a specified disease or condition– this resource could be an infographic, a flyer, a pamphlet, poster, podcast, video or any other suitable medium for communication. An explanatory report explaining the evidence base for the relationships and recommendations and citing references will also be submitted.
Weighting	30%
Due Date	Friday week 12, 5pm.
Submission Method	Online
Assessment Criteria	Marking rubric will be provided via Canvas prior to week 5.
Return Method	Online
Feedback Provided	Online - Within 3 weeks of submission. Individual feedback sheet/rubric provided..
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

Assessment 5 - Case Study

Assessment Type	Case Study / Problem Based Learning
Description	Students will analyse information on diet, energy and physical activity in case studies and apply this to assessment of health risks related to weight and malnutrition.
Weighting	20%
Due Date	Friday week 4, 5pm.
Submission Method	Online
Assessment Criteria	A marking rubric will be provided on Canvas in week 1.
Return Method	Online
Feedback Provided	Online - Within 3 weeks of submission. Individual feedback sheet/rubric provided..
Opportunity to Reattempt	Students WILL NOT be given the opportunity to reattempt this assessment.

ADDITIONAL INFORMATION

Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

*Skills are those identified for the purposes of assessment task(s).

Communication Methods

Communication methods used in this course include:

- Canvas Course Site: Students will receive communications via the posting of content or announcements on the Canvas course site.
- Email: Students will receive communications via their student email account.
- Face to Face: Communication will be provided via face to face meetings or supervision.

Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

Oral Interviews (Vivas)

As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the Oral Examination (viva) Procedure. In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the Student Conduct Rule.

Academic Misconduct

All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to https://policies.newcastle.edu.au/document/view-current.php?id=35

Adverse Circumstances

The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

1. the assessment item is a major assessment item; or
2. the assessment item is a minor assessment item and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
3. you are requesting a change of placement; or
4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at https://policies.newcastle.edu.au/document/view-current.php?id=236

Important Policy Information

The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures that support a safe and respectful environment at the University.

This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified and an amended course outline will be provided in the same manner as the original.