FOOD8403

Advanced and Applied Nutrition

Term Two // 2021

School of Chemical Engineering // UNSW Engineering

Course Overview

Staff Contact Details

Convenors

Name	Email	Availability	Location	Phone
Jayashree Arcot	j.arcot@unsw.edu.au	via email and phone	416A, E10, Hilmer Building	9385 5360

Tutors

Name	Email	Availability	Location	Phone
Kingsley Kalu	k.kalu@unsw.edu.au	email		

School Contact Information

For assistance with enrolment, class registration, progression checks and other administrative matters, please see the Nucleus: Student Hub. They are located inside the Library – first right as you enter the main library entrance. You can also contact them via http://unsw.to/webforms or reserve a place in the face-to-face queue using the UniVerse app.

If circumstances outside your control impact on submitting assessments, Special Consideration may be granted, usually in the form of an extension or a supplementary assessment. Applications for Special Consideration must be submitted online.

For course administration matters, please contact the Course Coordinator.

Course Details

Credit Points 6

Summary of the Course

The fundamental nutrition course in your undergraduate program provided you with a nice overview of the basics: the relationship between food and nutrients, how nutrients are digested and absorbed, nutrition through he life cycle, dietary guidelines, recommendations for intake and nutrition in disease. This course will build on the basic concepts of nutrition with respect to the population giving advanced treatment of the following topics: development of food and nutrition policies, food supplies, food consumption, nutritional epidemiology; population dietary references; national food programs such as food fortification, supplementary feeding schemes, nutritional rehabilitation, nutritionally modified foods, nutritional regulations and standards, nutrition education, dietary and nutrition interventions, principles, practice and evaluation of applied nutrition programs; advanced assessment methods in nutrition. The course will encourage critical thinking in a population context to improve overall nutritional status of the population.

Course Aims

The course aims to make you recognize how learning the right tools will assist you in understanding how to plan, design and execute nutrition programs and provide you with an appreciation of what you can do in a population context to prevent and treat non-communicable diseases with a food based approach. The specific aims are: 1. To understand the tools available to measure the nutrient bioavailability of foods and apply evidence based strategies for measurement and evaluation of nutritional status of a population. 2. To appreciate how national food and nutrition policies are developed 4. To understand how the entire food system affects the health of a nation

Course Learning Outcomes

1. Appreciate the importance of Food Composition Databases and their development for the assessment of nutritional deficiencies.
2. Evaluate critical judgement with respect to scientific information.
3. Communicate scientific information in a specific style.
4. Understand nutritional status measurements and interpretation in a population context
5. Plan nutrition intervention programs and understand how policies are developed for populations

This course is part of UNSW Food Science specialisations approved by the Institute of Food Technologists Higher Education Review Board (IFT HERB, 2021-2026).

Teaching Strategies

There will be lectures for 50% of the course and 50% tutorials which involves group discussions and presentations through online platforms such as Microsoft Teams/Blackboard Collaborate via MOODLE. Above all, independent study is encouraged both individually and in groups for the final workshop/presentation for a collective understanding of key topics in a community/population context.

The approach to teaching and learning stems from the philosophy of providing a challenging and collaborative learning environment to students to encourage critical thinking and develop expertise in the discipline. Students are encouraged to build on basic knowledge in the subject area and encouraged to

independently research on topics to equip themselves with the skills required in their career.

Additional Course Information

Time commitment

UNSW expects students to spend approximately 150 hours to successfully complete a 6 UOC course like FOOD4403/8403. We expect 60 hours to be spent participating in face-to-face classes or online classes as the case may be; 2 hours completing online quizzes, with the remaining 88 hours provided for private study, working on the assessments and preparing for the final presentation. Therefore, outside class you should be spending at least 7 hours per week working on this course.

Competence

Students are expected to enter FOOD4403/8403 having developed competencies in all the material covered in the pre-requisite courses (FOOD3220- Nutrition), at least. Little time is available to remediate any deficiencies in your knowledge of those topics. Over the course of the term, you will be developing new competencies and to illustrate the standards we expect, marking rubrics or guidelines will be provided for all assessments. The teaching staff will apply these marking guides fairly and provide you with feedback so you can continue to improve over the term and beyond.

Participation

When you attend face-to-face classes or online live class sessions, we expect you to actively participate in the activities organized. This may mean listening, taking notes, asking questions or engaging in peer discussions. It may also mean working by yourself or in groups on tutorial exercises. To complete the major project tasks, you are required to work in a team. We expect all team members to agree on how they will manage the team (e.g. making and documenting decisions), to assign the project work equitably and contribute to the delivery of project outputs to the best of their ability. Students are expected to contribute to online discussions through the course forum on MOODLE. You may wish to discuss challenges faced through this course, ask questions about course content, discuss tutorials and practice questions. It is expected that students will help each other, and the lecturers will contribute as required.

Attendance and punctuality

We expect students to be punctual and attend all lectures and tutorials even if delivered online. University commitments take precedence over regular work activities, holidays etc. If you miss a class, we expect you to catch up in your time, lectures will be recorded and made available through MOODLE. FOOD4403 Term 2, 2021 published at 23-05

Assessment

Assessment Tasks

Assessment task	Weight	Due Date	Student Learning Outcomes Assessed
Scientific Paper Evaluation	20%	02/07/2021 01:00 PM	2, 3, 4
Scenario-Based Test	25%	16/07/2021 01:00 PM	1
Test on lecture material	25%	23/05/2021 01:00 PM	2, 4
Final project report	30%	06/08/2021 11:59 AM	2, 3, 4, 5

Assessment Details

Assessment 1: Scientific Paper Evaluation

Start date: 02/07/2021 01:00 PM

Length: 2 hours

Details:

This is based on the group activity during tutorial time to critique a scientific publication.
This will be an evaluation of critical judgement with respect to scientific information

Peer assessment (5%)

Presentation (15%)

Turnitin setting: This is not a Turnitin assignment

Assessment 2: Scenario-Based Test

Start date: 16/07/2021 01:00 PM

Length: 60 mins

Details:

Scenario based test on Food Composition data based on the online FAO learning module

Turnitin setting: This is not a Turnitin assignment

Assessment 3: Test on lecture material

Start date: 30/07/2021 01:00 PM

Details:

This will be a summative assessment on the topics covered through lectures and tutorials

Turnitin setting: This is not a Turnitin assignment

Assessment 4: Final project report

Start date: 06/08/2021 11:59 PM

Details:

Students will be evaluated on their ability to collect appropriate literature related to a topic and make a critical assessment of the scenarios. This will be an assessment to test their abilities to evaluate different community levels scenarios and suggest programs as interventions based on analysed information.

Turnitin setting: This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Schedule

View class timetable

Timetable

Date	Type	Content
O Week: 25 May - 28 May		
Week 1: 31 May - 4 June	Lecture	Introduction; Forming groups; Topics for group presentations Lecture: Nutritional assessment techniques: Introduction and Principles
	Tutorial	FAO/INFOODS e-learning course-Introduction; getting started
Week 2: 7 June - 11 June	Lecture	Nutritional Assessment Techniques- Laboratory Assessment Methods
	Tutorial	FAO/INFOODS e-learning course; Final group project discussion
Week 3: 14 June - 18 June	Lecture	Nutritional Assessment techniques: Clinical Assessments: Introduction, relevance in population context.
	Tutorial	Group Project Discussion
Week 4: 21 June - 25 June	Lecture	Nitrogen Balance studies; Evaluation of protein quality of foods
	Tutorial	Group Project Discussion- Independent
Week 5: 28 June - 2 July	Lecture	Bioavailability of foods- relevance to public nutrition policy
	Tutorial	Tutorial on Critical assessment of scientific papers: Group Assessment-Compulsory attendance
Week 6: 5 July - 9 July	Lecture	Flexible Week- No Lecture
	Tutorial	Flexible Week- No tutorial
Week 7: 12 July - 16 July	Lecture	Food Systems and Interventions Food balance sheets
	Tutorial	Scenario-based test on Application of Food Composition Database Continuation of final group project discussion-independent. No formal tutorial.
Week 8: 19 July - 23 July	Lecture	Evidence-based science; nutritional epidemiology

		plus levels of evidence
	Tutorial	Group Project Discussions
Week 9: 26 July - 30 July	Lecture	Food and Nutrition Policy; Approaches/strategies to reduce malnutrition; food fortification; nutrition education. Nutrition Rehabilitation and Interventions.
	Tutorial	Online (MOODLE) Test -on lecture material covered until Week 8. Group Project Discussion
Week 10: 2 August - 6 August	Lecture	Group Project Presentations
	Tutorial	Group Project Presentations and submission of final report.

Resources

Prescribed Resources

Prescribed Resources

Gibson, R (2005) Principles of Nutritional Assessment. 2nd edition. ISBN: 9780195171693

Kirkwood and Sterne (2003). Essential Medical Statistics, 2nd Edition. John Wiley & Sons, Ltd., Oxford, UK.

Fidanza, F. 1991. Nutritional Status Assessment. A manual for population studies. 1st Edition, Chapman and Hall.

Gibson, RS. 1993. Nutritional Assessment. A laboratory manual. Oxford University Press.

Lee, RD and Nieman, DC. 1993. Nutritional Assessment. Brown and Benchmark Publishers.

Lohman, TG, Roche, AF, Martorell, R (1988). Anthropometric standardization reference manual, Human Kinetics Books

In addition to the above, more resources such as key websites and references will be provided for each topic during the lecture.

Recommended Resources

There is no set textbook for this course.

www.fao.org

www.who.org

www.aihw.gov.au

www.nhmrc.gov.au

www.foodstandards.gov.au

https://www.wfp.org/

Videos, lecture slides and suggested readings, tutorial exercises, plus links to other online resources will be provided on MOODLE. These will be progressively released as the term progresses.

You can access the full text of online resources available from the UNSW library using the UNSW VPN Service (https://www.it.unsw.edu.au/staff/vpn/#AccessingLibraryJournals).

Course Evaluation and Development

Student feedback on both course and teaching wil be done through MOODLE from Week 8 onwards. This is a formal University level student feedback. During the first week, when assessments and

course schedules are discussed along with expectations in the course, feedback from the previous year on the course will be shared and changes made as a result of that will also be discussed. The focus will be on how to improve student experience in the course.

Submission of Assessment Tasks

In the School of Chemical Engineering, all written work will be submitted for assessment via Moodle unless otherwise specified. Attaching cover sheets to uploaded work is generally not required; when you submit work through Moodle for assessment you are agreeing to uphold the Student Code.

Some assessments will require you to complete the work online and it may be difficult for the course coordinator to intervene in the system after the due date. You should ensure that you are familiar with assessment systems well before the due date. If you do this, you will have time to get assistance before the assessment closes.

All submissions are expected to be neat and clearly set out. Your results are the pinnacle of all your hard work and should be treated with due respect. Presenting results clearly gives the marker the best chance of understanding your method; even if the numerical results are incorrect.

Marking guidelines for assignment submissions will be provided at the same time as assignment details to assist with meeting assessable requirements. Submissions will be marked according to the marking guidelines provided.

Late penalties

Unless otherwise specified, submissions received after the due date and time will be penalised at a rate of 10% per day or part thereof (including weekends). For some activities including Moodle quizzes and Team Evaluation surveys, extensions and late submissions are not possible.

Special consideration

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to submitting an assessment or sitting an exam.

UNSW has a Fit to Sit / Submit rule, which means that if you attempt an exam or submit a piece of assessment, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's Special Consideration page.

Please note that students will **not** be required to provide **any** documentary evidence to support absences from any classes missed **because of COVID-19 public health measures such as isolation**. UNSW will **not** be insisting on medical certificates from anyone deemed to be a positive case, or when they have recovered. Such certificates are difficult to obtain and put an unnecessary strain on students and medical staff.

Applications for special consideration **will** be required for assessment and participation absences – but no documentary evidence **for COVID 19 illness or isolation** will be required.

Academic Honesty and Plagiarism

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage (International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013). At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity and plagiarism can be located at:

- The Current Students site
- The ELISE training site

The Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: https://student.unsw.edu.au/conduct.

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism. Further information about referencing styles can be located at https://student.unsw.edu.au/referencing.

For assessments in the School of Chemical Engineering, we recommend the use of referencing software such as Mendeley or EndNote for managing references and citations. Unless required otherwise specified (i.e. in the assignment instructions) students in the School of Chemical Engineering should use either the APA 7th edition, or the American Chemical Society (ACS) referencing style as canonical author-date and numbered styles respectively.

Academic Information

To help you plan your degree, assistance is available from academic advisors in The Nucleus and also in the School of Chemical Engineering.

Additional support for students

- Current Student Gateway
- Engineering Current Student Resources
- Student Support and Success
- Academic Skills
- Student Wellbeing, Health and Safety
- Equitable Learning Services
- IT Service Centre

Course workload

Course workload is calculated using the Units-Of-Credit (UOC). The normal workload expectation for one UOC is approximately 25 hours per term. This includes class contact hours, private study, other learning activities, preparation and time spent on all assessable work.

Most coursework courses at UNSW are 6 UOC and involve an estimated 150 hours to complete, for both regular and intensive terms. Each course includes a prescribed number of hours per week (h/w) of scheduled face-to-face and/or online contact. Any additional time beyond the prescribed contact hours should be spent in making sure that you understand the lecture material, completing the set assignments, further reading, and revising for any examinations.

On-campus class attendance

Physical distancing recommendations must be followed for all face-to-face classes. To ensure this, only students enrolled in those classes will be allowed in the room. Class rosters will be attached to corresponding rooms and circulated among lab demonstrators and tutors. No over-enrolment is allowed in face-to-face class. Students enrolled in online classes can swap their enrolment from online to a **limited** number of on-campus classes by Sunday, Week 1.

In certain classroom and laboratory situations where physical distancing cannot be maintained or the staff running the session believe that it will not be maintained, face masks will be designated by the course coordinator as **mandatory PPE** for students and staff. Students are required to bring and use their own face mask. Mask can be purchased from IGA Supermarket (Map B8, Lower Campus), campus pharmacy (Map F14, Middle Campus), the post office (Map F22, Upper Campus) and a vending machine in the foyer of the Biological Sciences Building (Map E26, Upper Campus).

Your health and the health of those in your class is critically important. You must stay at home if you are sick or have been advised to self-isolate by NSW health or government authorities. Current alerts and a list of hotspots can be found here. Do not come to campus if you have any of the following symptoms: fever (37.5 °C or higher), cough, sore throat, shortness of breath (difficulty breathing), runny nose, loss of taste, or loss of smell. If you need to have a COVID-19 test, you must not come to campus and remain in self-isolation until you receive the results of your test.

You will not be penalised for missing a face-to-face activity due to illness or a requirement to self-

isolate. We will work with you to ensure continuity of learning during your isolation and have plans in place for you to catch up on any content or learning activities you may miss. Where this might not be possible, an application for fee remission may be discussed. Further information is available on any course Moodle or Teams site.
For more information, please refer to the FAQs: https://www.covid-19.unsw.edu.au/safe-return-campus-faqs

Image Credit

Dr Peter Wich

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Acknowledgement of Country

We acknowledge the Bedegal people who are the traditional custodians of the lands on which UNSW Kensington campus is located.