

**FSHN3030: Future Food: Technologies, Issues and Trends**

Ourimbah

Semester 1 - 2024



**COURSE OUTLINE**

**OVERVIEW**

<b>Course Description</b>	The world population will always need feeding, but the food production, consumption and regulatory environments are constantly evolving in the face of new technologies and challenges. This course will address the contemporary knowledge, trends, debates and controversies that shape current and future food systems, production, regulation, utilisation and sustainability. By the end of this course, students will have developed the skills to engage with and reflect on these key issues, readying them to engage with future challenges and opportunities in the food sector.
<b>Academic Progress Requirements</b>	Nil
<b>Assumed Knowledge</b>	FSHN1010 and FSHN1020 Students must have successfully completed a minimum of 60 units at 2000 level in order to enrol in this course.
<b>Contact Hours</b>	<b>Ourimbah</b> <b>Self-Directed Learning</b> Online 2 hour(s) per week(s) for 12 week(s) starting Week 1 Students will need to review resources and complete activities online before attending the seminars and tutorials.  <b>Seminar</b> Face to Face On Campus 1 hour(s) per week(s) for 12 week(s) starting Week 1  <b>Tutorial</b> Face to Face On Campus 2 hour(s) per week(s) for 12 week(s) starting Week 1
<b>Unit Weighting</b>	10
<b>Workload</b>	Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10 unit course.

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# CONTACTS

<b>Course Coordinator</b>	<b>Ourimbah</b> Dr Taiwo Akanbi <a href="mailto:Taiwo.Akanbi@newcastle.edu.au">Taiwo.Akanbi@newcastle.edu.au</a> (02) 43484117 Consultation: By appointment
<b>Teaching Staff</b>	Other teaching staff will be advised on the course Canvas site.
<b>School Office</b>	<b>School of Environmental and Life Sciences</b> SO-104 / SO-105 Science Offices OURIMBAH <a href="mailto:CESE-SELS@newcastle.edu.au">CESE-SELS@newcastle.edu.au</a> (02) 4349 4568 / 4348 4115 9am-5pm (Mon-Fri)

# SYLLABUS

<b>Course Content</b>	<ul style="list-style-type: none"><li>• Sustainable food systems and products</li><li>• Novel food processing technologies</li><li>• Australian and international regulation regarding food, nutrition and health claims</li><li>• Indigenous, novel and underutilized foods</li></ul>
<b>Course Learning Outcomes</b>	<p><b>On successful completion of this course, students will be able to:</b></p> <ol style="list-style-type: none"><li>1. Critically analyse and engage with contemporary issues, trends and controversies important to the future of food.</li><li>2. Apply critical and reflective thinking to contemporary issues in food.</li><li>3. Interpret and evaluate current government rules and regulations related to food labelling, manufacture, and claims.</li><li>4. Integrate information on contemporary issues in food to make predictions on future trends.</li></ol>
<b>Course Materials</b>	<p><b>Other Resources:</b></p> <p>CANVAS site: Students enrolled in the course can login <a href="https://canvas.newcastle.edu.au/">https://canvas.newcastle.edu.au/</a> to access the CANVAS site used to support this course. You need to visit the CANVAS site on a regular basis.</p> <p><b>Recommended Reading:</b></p> <ul style="list-style-type: none"><li>• Future Foods - How modern science is transforming the way we eat (by David Julian McClements). Publisher: Springer</li><li>• Novel food packaging techniques (by Zeuthen, P; Bigh-Srensen, Lief). Publisher: Woodhead publishing</li><li>• Advances and prospective applications of 3D printing for health improvement and personalized nutrition (Escalante-Aburto et al., 2021). Comprehensive Reviews in Food Science and Food Safety. Publisher: Wiley.</li><li>• FSANZ Information on Nutritional Content claims and health claims available</li><li>• Australia New Zealand Food Standards Code – Standard 1.2.7 – Nutrition, health and related claims</li></ul>

# SCHEDULE

Week	Week Begins	Topic	Learning Activity	Assessment Due
1	26 Feb	Introduction - Course organisation and assessment	Introduction: Learning goals, guidelines, and participation	None this week
2	4 Mar	Future foods - Current trends, debates, and controversies	Health claims for novel foods	None this week
3	11 Mar	Food standards and government regulations	Calculating HSR and Health Stars, using the Food Standards code	None this week
4	18 Mar	Alternative and innovative food ingredients	How to analyse and write a report on contemporary food issues	None this week
5	25 Mar	Innovative food processing techniques	Lab-grown meat – Science and Safety (GUEST LECTURE)	None this week
6	1 Apr	The Future of Food waste	Briefing on assessment 2 - "Case study of a novel product" (Tips and ideas)	Assessment 1 (Written assignment) Due - Friday 05/04/24 at 10pm
7	8 Apr	Sustainable food packaging	Guest Lecturer Feedback on assessment 1	None this week
<b>Mid-Semester Recess</b>				
<b>Mid-Semester Recess</b>				
8	29 Apr	3D food printing	Future foods – 3D printing of food	None this week
9	6 May	No Seminar.  Drop-in session for Q&A on case study.  Time to work on case study report.	No Tutorial.  Drop-in session for Q&A on case study  Time to work on case study report (Case study report – due)	Assessment 2 (Case study report) Due - Friday 10/05/24 at 10pm
10	13 May	Growing a healthy future with indigenous foods	Bush food walk (Ourimbah campus)	None this week
11	20 May	The future of snacking	Students' presentation on future food trends I	Assessment 3 - Students' presentation on future food trends I (Tuesday 21/05/2024)
12	27 May	Precision fermentation technology for future foods	Students' presentation on future food trends II	Assessment 3 - Students' presentation on future food trends II (Tuesday 28/05/2024)
13	3 Jun	Revision - Free for consultations	Submission of reflective journal (Assessment 4 due this week)	Reflective journal (Assessment 4) Due Friday 07/06/24 at 10pm
<b>Examination Period</b>				
<b>Examination Period</b>				

# ASSESSMENTS

This course has 4 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Analysis of the contemporary media portrayal of a novel or controversial food issue	Friday, 05/04/2024 at 10pm	Individual	30%	1
2	Case study of a novel product or food company	Friday, 10/05/2024 at 10pm	Individual	30%	1, 3
3	Presentation on future food trends	Tuesday 21/05/2024 Tuesday 28/05/2024	Individual	25%	2, 3, 4
4	Weekly reflective journal	Friday 07/06/24 at 10pm	Individual	15%	2, 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 - Analysis of the contemporary media portrayal of a novel or controversial food issue

<b>Assessment Type</b>	Written Assignment
<b>Purpose</b>	Written assessment meets the course objectives of knowledge acquisition and demonstrated assimilation of data to produce articulate and concise documents which convey an evidence-based understanding of the concepts and topics.
<b>Description</b>	Students will analyse contemporary media portrayal of a novel or controversial food issue. They will discuss how the media represents the issue and how this representation shapes public opinion. Week 4 Tutorial is specifically designed to provide detailed instructions and assist students in writing this report.
<b>Weighting</b>	30%
<b>Due Date</b>	Friday, 05/04/2024 at 10pm
<b>Submission Method</b>	Online
<b>Assessment Criteria</b>	Where required, detailed assessment criteria for each assessment task and any additional material will be available on the course canvas site no less than two weeks before the due date of each assessment. However, assessment criteria will usually be discussed in class before the commencement of assignments etc.
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Returned Work - Week 7. Returned work will be a thorough mark up with comments/critique.

## Assessment 2 - Case study of a novel product or food company

<b>Assessment Type</b>	Case Study / Problem Based Learning
<b>Purpose</b>	The purpose of this assessment is to evaluate how students develop skills in analytical thinking and reflective judgement by viewing an issue from multiple perspectives. This gives students opportunities to engage with current issues in food science, making their learning relevant to real-world situations.
<b>Description</b>	Students will write a case study report on a novel product or food company. They will be able to choose from a list of cases or come up with their own case study and identify problems demonstrated in the case. Students' ability to analyse the case and provide a realistic solution to the issues/problems will be assessed. Week 6 Tutorial will assist students in writing their case study report.
<b>Weighting</b>	30%
<b>Due Date</b>	Friday, 10/05/2024 at 10pm
<b>Submission Method</b>	Online
<b>Assessment Criteria</b>	Where required, detailed assessment criteria for each assessment task and any additional material will be available on the course canvas site no less than two weeks before the due

	date of each assessment. However, assessment criteria will usually be discussed in class before the commencement of assignments etc.
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Returned Work - Week 11. Returned work will be a thorough mark up with comments/critique.

### Assessment 3 - Presentation on future food trends

<b>Assessment Type</b>	Presentation
<b>Purpose</b>	This activity aims to enable peer-to-peer learning and the development of oral communication skills and confidence. Students should develop the skills to synthesize an opinion and convey information clearly in a well presented and articulate manner.
<b>Description</b>	Short presentation on future food trends followed by questions and discussions.
<b>Weighting</b>	25%
<b>Due Date</b>	Tuesday 21/05/2024 Tuesday 28/05/2024
<b>Submission Method</b>	In Class Individual oral presentation
<b>Assessment Criteria</b>	Where required, detailed assessment criteria for each assessment task and any additional material will be available on the course canvas site no less than two weeks before the due date of each assessment. However, assessment criteria will usually be discussed in class before the commencement of assignments etc.
<b>Return Method</b>	Not Returned
<b>Feedback Provided</b>	In Person

### Assessment 4 - Weekly reflective journal

<b>Assessment Type</b>	Journal
<b>Purpose</b>	Reflective journal helps to motivate students in the process of reflection on their own learning.
<b>Description</b>	Students will engage in weekly reflection of what they have learned throughout the course. These assignments are presented in Topic 1 to allow students to plan ahead. A final culminating submission will be due in week 13. No submission is required until then.
<b>Weighting</b>	15%
<b>Due Date</b>	Friday 07/06/24 at 10pm
<b>Submission Method</b>	Online Online
<b>Assessment Criteria</b>	The assessment is to be submitted online, usually via Canvas. Assessment criteria will be discussed in detail in class before commencement of assignments. The discussion will take place in weeks 1 and 2 during Seminar and Tutorial.
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Returned Work - Week 14. The assessment will be returned online, usually via canvas or e-mail.

## 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/>.

### 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>

### 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.*

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