AGRI 3009 AGRICULTURAL TECHNOLOGY

Credit Points 10

Legacy Code 301449

Coordinator Ryan Mcquinn (https://directory.westernsydney.edu.au/search/name/Ryan Mcquinn/)

Description Agricultural Biotechnology is rapidly developing and this subject will assure you the knowledge and skills that contribute to the future of sustainable food production. The subject material integrates agronomic principles with current and emerging biotechnology, highlighting issues and solutions based around case studies. This approach facilitates an analytical framework that goes beyond traditional production systems including eco-farming, life-cycle and regenerative agriculture, along with development of innovative and integrated production and waste systems. Key concepts include sustainable resource use, nitrogen balance, energy efficiency, and greenhouse gas emissions and market analysis.

School Science

Discipline Agriculture

Student Contribution Band HECS Band 1 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Restrictions

Successful completion of 120 credit points

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Describe the key determinants of biotechnology in agricultural production systems.
2. Critically evaluate the impact of biotechnology on sustainable food production systems.
3. Articulate the pathways to incorporate biotechnology into agriculture.
4. Analyse the role of technology in regenerative and sustainable agriculture systems.
5. Apply analytical principles to develop emerging agriculture enterprises.

Subject Content

1. New and emerging biotechnology in agriculture.
2. Sustainable food production systems.
3. Biotechnology in eco-farming, lifecycle and regenerative agriculture.
4. Innovation pathways in plant and animal production.
5. Technology applications in regenerative and sustainable agricultural production.
6. Systems and market analysis of emerging Agrifood enterprises.

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/ Group Task
Report	3 x 15 minutes	30	N	Individual
Viva Voce	2x 1000 words	40	N	Individual
Proposal	3000 words	30	N	Individual

Teaching Periods

Spring (2022)

Hawkesbury

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=AGRI3009_22-SPR_HW_D#subjects)

Spring (2023)

Hawkesbury

On-site

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View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=AGRI3009_23-SPR_HW_1#subjects)