

HR933-20 Challenges of Global Food Security

20/21

Department

Life Sciences

Level

Taught Postgraduate Level

Module leader

Rosemary Collier

Credit value

20

Module duration

35 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

Global food security, providing access for the world's population to affordable, safe and nutritious food, is one of the major challenges of the 21st century.

[Module web page](#)

Module aims

This module will provide an understanding of the elements that contribute to the food security agenda. An essential element of the module will be a critical review of current physical, political and biotic drivers. We will explore the strategies being deployed that influence food security including projected population changes, climate change, ecosystem services and resilience, disease and fossil fuel dependence. The module will present a global perspective.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Introduction to food systems and food security
Water security
Waste
Fossil fuel dependency
Food insecurity and links with environmental change
Household food insecurity in high income countries
Food insecurity as a complex problem
Complexity Science and food insecurity
Food insecurity – the role of the multidisciplinary team
Food ethics
Wild food
Human populations
Cities and food security
Data handling exercise
Group presentations on food security around the globe

Learning outcomes

By the end of the module, students should be able to:

- Evaluate the scale and importance of the global challenge of food security
- Evaluate critically the drivers of change in the context of food security
- Understand the approaches being taken to analyse and address issues associated with global food security
- Analyse the conflicting requirements of environmental protection and food production
- Communicate contemporary issues relating to international responses to food supply.

Indicative reading list

Millennium Ecosystem Assessment (2005) Island Press

Reaping the Benefits; Science and the sustainable intensification of global agriculture (2009).
Royal Society Policy Document 11/09

Lester R Brown (2005) Outgrowing the earth. Earthscan.

Geoffrey Lawrence, Kristen Lyons and Tabatha Wallington (2011) Food security, nutrition and sustainability. Earthscan.

Bryan L. McDonald (2010) Food security. Polity.

John Ingram, Polly Ericksen, and Diana Liverman (2010) Food security and global environmental change. Earthscan.

Geoff Tansey and Tasmin Rajotte (2008) The future control of food: a guide to international negotiations and rules on intellectual property, biodiversity and food security. International Development Research Centre.

Carolyn Steel (2008) Hungry city: how food shapes our lives. Chatto & Windus.

Julia Wright (2011) Sustainable agriculture and food security in an era of oil scarcity: lessons from Cuba. Earthscan.

[View reading list on Talis Aspire](#)

Subject specific skills

Understand the approaches being taken to analyse and address issues associated with global food security

Transferable skills

Communication

Analysis

Evaluation

Study

Teaching split

Provider	Weighting
Life Sciences	96%
Statistics	4%

Study time

Type	Required
Lectures	16 sessions of 1 hour (8%)
Seminars	1 session of 3 hours (2%)
Other activity	6 hours (3%)
Private study	125 hours (62%)
Assessment	50 hours (25%)
Total	200 hours

Private study description

Independent research

Other activity description

Workshop

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A

	Weighting	Study time
Student devised assignment	50%	25 hours

The devised piece is an opportunity to display a student's critical engagement with the themes and theories addressed in the module and for them to take a considered and creative approach as to how they might practically apply what they have learned, in a medium of their choosing. The form of the devised piece is down to the student, who should consider which issues and theories they want to address, and then should develop a piece of work in whatever form/medium they feel they can use to describe them best. This could be a story, workshop, presentation, blog, video, piece of academic writing, website, learning resource, diary, etc. Food security is a very complex, interdisciplinary topic and it will be helpful to the students to address it using a different medium to the 'normal' academic ones; although they still have the option to do that. This activity is based on a model successfully delivered by IATL. Students will be supported in their chosen activity either by SLS staff, or wider University colleagues, including ITS through available guidance/training resources.

In assessing the work we will look for an explanation of the rationale for their choice of form/medium. First and foremost, the student needs to make sure that they clearly demonstrate their understanding of, and critical engagement with, with theory. To ensure consistency of assessment and to help students contextualise their work, each student is required to write an accompanying explanation (maximum 1,500 words excluding bibliography), which will be assessed together with the piece of work they have prepared. If they did choose to do a 'conventional' essay then they will still be required to explain why they chose that medium.

Students will be provided with a full explanation of this assessment method at the start of their module and will be supported throughout the activity. This type of assessment will encourage them to engage with wider University resources (e.g. central ITS, the Library, etc.), thus contributing to a more holistic University student experience.

Group presentation and linked 1000 word summary of individual contribution	50%	25 hours
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This assignment consists of preparing and giving a group seminar presentation together with the submission, by each individual, of a 1,000 word written description of their personal contribution. Students are allocated to groups randomly. Each group chooses a 'region/continent' (e.g. Western Europe, Eastern Europe, Africa, Asia, South America, North America, Middle East). Each group must consider a different region. Each group researches the food system and issues around food security at present and in the future in that region. Each student must research a

Weighting

Study time

different aspect of the food system so that the group presentations are balanced. So they should choose from e.g. production, logistics (including storage), waste, access to food, food affordability, climate change, food systems, justice, poverty, conflict etc. The group prepares and gives a presentation on the continent/region covering the food system and current and future food security issues. They can also make suggestions about how food security might be improved in future. In addition each student submits a 1,000 word description of their individual contribution.

Feedback on assessment

Written feedback through Moodle

Availability

Courses

This module is Core for:

- Year 1 of THRA-D4A3 Postgraduate Taught Food Security