

GENERAL AGRICULTURE (T)

COURSE OUTLINE

1. GENERAL			
SCHOOL	School of Agricultural Sciences		
ACADEMIC UNIT	Department of Agriculture		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	ΓΠ2002	SEMESTER	2nd
COURSE TITLE	General Agriculture (T)		

INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course	WEEKLY TEACHING HOURS	CREDITS
	3	3
	1	1
Total	4	4

COURSE TYPE general background, special background, specialised general knowledge, skills development	Specialised Background Course
PREREQUISITE COURSES	None
LANGUAGE OF INSTRUCTION and EXAMINATIONS	English
OFFERED TO ERASMUS STUDENTS	Yes (in English)
COURSE WEBSITE (URL)	https://iro.hmu.gr/agriculture-english-courses/

2. LEARNING OUTCOMES
Learning outcomes
LEARNING OUTCOMES Upon successful completion of the course, students will be able to: • understand the fundamental principles of agricultural science and the cultivation of field crops for the production of products useful to humans and animals; • identify the seeds of the most important field crops and understand basic aspects of their anatomy, morphology and physiology; • understand the main types of farming systems, as well as the climatic, soil-related and biotic factors affecting crop growth and yield.
General Competences
Generic Competences • Search for, analyse and synthesise data and information using appropriate technologies. • Decision-making. • Independent work and teamwork. • Generation of new research ideas. • Promotion of free, creative and inductive thinking.

3. SYLLABUS

COURSE CONTENT

Theoretical Syllabus

- Fundamental principles and historical development of agriculture.
- Major crops cultivated in Greece and worldwide.
- Agricultural resources of Greece and their contribution to the national economy.
- Categories of field crops and basic aspects of their anatomy, morphology and physiology.
- Climatic factors, including temperature, solar radiation, winds, frost and precipitation, and their effects on crops.
- Soil factors, including soil texture, structure, organic matter, microorganisms, soil reaction and related properties.
- Plant reproduction and the fundamental principles of weed management.
- Plant nutrition and fertilisation.
- Seed quality and soil tillage systems.
- Sowing methods, cropping systems, harvesting and storage of field-crop products.

Practical Exercises

- Classification of field crops.
- Seed dormancy, germination and emergence.
- Morphology of field crops.
- Varietal and commercial purity of seeds.
- Identification of field-crop seeds and use of seed collections.
- Determination of seed moisture content, specific weight and thousand-kernel weight.
- Field-crop weeds: morphology, biology and classification.
- Weed identification using weed collections.
- Seed germination capacity and fundamental principles of weed management.

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY

Face-to-face, Distance learning, etc.

Teaching Method: Face-to-face teaching through lectures in the lecture hall and practical sessions in the laboratory.

USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

Use of ICT in teaching, laboratory education, communication with students

Use of Information and Communication Technologies (ICT)

- PowerPoint presentations and audiovisual teaching material.
- Learning support through the HMU e-Class platform.
- Communication with students via the e-Class platform and e-mail.

TEACHING METHODS

The manner and methods of teaching are described in detail.

Activity	Semester workload
Lectures	39
Practical/Laboratory Exercises	13
Independent Study	48
Course total	100

STUDENT PERFORMANCE EVALUATION

Description of the evaluation procedure

Theory

Assessment consists of a final examination accounting for **100%** of the theoretical component. Students may be required to answer:

- true/false questions;
- matching questions;
- essay-type questions;
- multiple-choice questions;
- questions requiring the completion of terms in diagrams;
- one-word or short-answer questions.

An optional coursework assignment may also be undertaken.

Practical Exercises

Assessment of the practical component is integrated into the theoretical assessment and includes written and/or oral examination through:

- practical exercises;
- critical-thinking questions;
- application-based questions.

5. ATTACHED BIBLIOGRAPHY

RECOMMENDED LITERATURE

- Dordas, C. (2018). *General Agriculture*. Christina and Vasiliki Kordali Publications. ISBN: 978-960-357-127-8. Eudoxus Book Code: 77107574.
- Bilalis, D., Papastyliaou, P.-T., & Travlos, E. S. (2018). *Agriculture*. Pedio Publications. ISBN: 978-960-546-039-6. Eudoxus Book Code: 77118175.
- Karamanos, A. I. (2011). *General Agriculture*. Papazisis Publications. ISBN: 978-960-02-2623-2. Eudoxus Book Code: 68387961.
- Christakos, K. (2004). *General Agriculture: Laboratory Notes*. TEI of Crete, Heraklion.
- Papakosta-Tasopoulou, D., & Koutroubas, S. (2025). *Special Crop Production: Cereals and Legumes*. Christina and Vasiliki Kordali Publications. ISBN: 978-960-357-151-3. Eudoxus Book Code: 143554774.
- Papakosta-Tasopoulou, D. (2013). *Industrial Crops*. Christina and Vasiliki Kordali Publications. ISBN: 978-960-357-112-4. Eudoxus Book Code: 32998760.
- Dordas, C. (2024). *Aromatic and Medicinal Plants*. Christina and Vasiliki Kordali Publications. ISBN: 978-960-357-147-6. Eudoxus Book Code: 133043861.
- Ibrahim-Avraam, Ch. A. (2024). *Elements of Crop Cultivation and Seed Production*. University of Thessaly Property Management and Development Company. ISBN: 978-960-9439-92-3. Eudoxus Book Code: 133039103.
- Trantas, E. (2024). *Plant Breeding Laboratory Manual*. Kallipos Open Academic Editions. ISBN: 978-618-228-093-5. Eudoxus Book Code: 122339306.
- Tokatlidis, I. (2023). *Plant Breeding*. Kallipos Open Academic Editions. ISBN: 978-618-228-024-9. Eudoxus Book Code: 122074390.
- Travlos, I., & Kanatas, P. (2021). *Weed Science and Agriculture*. Pedio Publications. ISBN: 978-960-635-383-3. Eudoxus Book Code: 102124829.
- Vasilakoglou, I., & Dimas, K. (2021). *Modern Weed Science*. Christina and Vasiliki Kordali Publications. ISBN: 978-960-357-140-7. Eudoxus Book Code: 102076112.
- Rao, P. L., Thirupathi, I., & Sadvi, P. (2018). *Glimpse on General Agriculture: For ICAR-JRF, SRF, NET and ASRB Prelims*. ISBN: 978-9386652454.
- Sheaffer, C., & Moncada, K. (2011). *Introduction to Agronomy: Food, Crops, and Environment*. Delmar Cengage Learning.
- Sparks, D. L. (2026). *Advances in Agronomy*. Elsevier. ISBN: 978-0-443-43268-2.

