

FALL COURSE DESCRIPTIONS

Students can earn from 12 to 15 credits. All courses at Perrotis are offered in English and receive 3 US credits each.

Note: All courses marked with * need a minimum of five study abroad students to run.

Perrotis College courses support the school's philosophy of learning by doing, offering hands-on experience in our labs or fields. Students gain a unique European perspective into the agro-technology sector and benefit from the school's holistic approach.

Students can choose courses from the following fields of study:

- ✓ Sustainable Agriculture & Management
- ✓ Food Science & Technology
- ✓ International Business & Food Business Management
- ✓ Animal Science
- ✓ Environmental Science
- ✓ Digital Marketing

Greek Cultural Experience

Greek Cultural Experience is a mandatory course for all terms.

This core course introduces students to Modern Greek life and culture, including basic elements of Greek language, history, society, cuisine and traditional dance. The course enriches the students' experience by visiting important historical, religious and cultural sites throughout Greece. Students are introduced to basic concepts that enable them to understand and respond to cultural differences.

Sustainable Agriculture & Management

GRK4010 Introduction to Agro-Environmental Systems (Year 2)

This course introduces the major parts of the agro-environmental continuum and a systems approach to sustainable soil-plant-water management. Students learn the major processes and mechanisms of each system component, the interaction between the components and the major consequences from management practices that lead to environmental problems.

GRK4021 Environmental Technology and Agricultural Machinery (Year 2)

The fundamentals of environmental technology and agricultural machinery use, including safe use and basic repair techniques of field tractors and implements are explored. Emphasis is also given toward selection investment, management of farm machinery and environmental sustainability.

GRK4033 Introduction to ICT Systems for Agriculture and the Environment (Year 2)

Gain an introduction to the most updated computer operating systems, and useful software and hardware used for editing, calculations and other farm management information and decisions. Examples for ICT agricultural applications and environment are included. Upon completion students are able to describe, utilize information technologies and demonstrate skill in ICT applications.

GRK4035 Agricultural Marketing (Year 2)

Students are introduced to theories, concepts and problems of marketing goods and services. Topics include promotion, placement and pricing strategies for products. In addition students will learn the role of research in marketing. Building on the above, students are introduced to the tools, factors and concepts used by management in planning, establishing policies and solving marketing problems. Specific topics include consumer demand and behavior, location analysis, marketing, functions, institutions, channels, prices and public policy.

GRK4036 Principles of Microbiology and Chemistry (Year 2)

The course introduces students to main concepts of inorganic and organic chemistry. Furthermore, students are introduced to microorganisms, their nature and properties and how they relate to the environment and to food coming from soil. Upon completion, students are able to apply and exploit this knowledge for the optimal solving of problems relevant to the abiotic environment (soil) and the living systems (plants and animals).

GRK5004 Principles of Precision Agriculture & Environmental Sustainability (Year 3)

The key principles of precision agriculture and environmental sustainability are addressed. Students learn about the design and implementation of simple precision agriculture management plans, complemented by field experience using key precision agriculture tools and technologies. The course addresses how precision agriculture relates to changes in agro-environmental systems through EU Common Agricultural Policy.

GRK5027 Plant Physiology (Year 3)

How do plants grow? More importantly how can they grow faster, better, stronger? Learn about the fundamentals of plant physiology and understand the biological processes affecting plant growth, development and yield. This course helps students understand the “plant” component of the soil-plant-atmosphere continuum, providing a background for the sustainable management of production systems. *Prerequisites: Completion of a course in Botany or Plant Biology, or equivalent background.*

GRK5030 Principles of Plant Pathology (Year 3)

Fundamental knowledge of plant-microbe interactions is needed to identify symptoms of major diseases and diagnose the causes of diseases. Students learn about major management practices for disease control, from understanding how pathogens attack to soil climate conditions favoring plant disease. *Prerequisites: Completion of a course in Botany or Plant Biology, or equivalent background.*

GRK5049 Waste Management (Year 3)

This course introduces students to specialized knowledge in areas of waste management including wastewater, solid waste and air pollution. Students develop an understanding of the complex environmental systems and growing problems associated with waste production and disposal in a developed society.

GRK5056 Biometry and Agricultural Experimentation (Year 3)

In order to gain a representative sample from large amounts of data, statistics has become a major tool in biological sciences. This course provides students with basic statistical knowledge, allowing students to properly perform data analysis, produce appropriate graphs, correlate data, use predictions models, and interpret the statistical analysis.

GRK5057 Principles of Pesticides – Applications & Safety (Year 3)

This course provides an in-depth study of pesticide safety and application, including chemical principles, selection methods, application techniques, regulations, and environmental concerns. Emphasis is placed on integrated pest management (IPM) strategies and the responsible use of pesticides in agricultural and non-agricultural settings.

GRK6020 GIS in Agriculture & the Environment (Year 4)

GIS (Geographic Information System) allows us to visualize and interpret data in order to understand patterns, relationships, and trends. In this course, students are introduced to GIS software and technology as well as its agricultural applications. Data relating to Earth's surface is very applicable to agriculture and students work with GIS software in order to evaluate land, soil and crop systems to provide optimum management solutions, integrating multiple layers of information. This course emphasizes hands-on experience working with producers, vendors, and researchers collecting data; developing spatial databases, analyzing data; and communicating findings.

GRK6039 Horticultural Science (Year 4)

The study of ornamentals and edibles dates back thousands of years and continues to be an important field of study. Students learn the fundamentals of horticultural science (fruit, vegetable, flower plants) as well as about new and innovative production systems and important aspects of their production management. *Prerequisites: Completion of a course in Botany or Plant Biology, or equivalent background.*

GRK6045 Post-Harvest & Olive Processing (Year 4)

This Course introduces students to the main practices and methods exercised during olive harvesting and the process right after the harvesting (postharvest) of table olives and olives for olive oil production. Factors affecting table olives and olive oil quality at postharvest and final processing are addressed.

GRK6063 Medicinal & Aromatic Plant Production (Year 4)

The history, importance and main cultural practices involved in sustainable medicinal and aromatic plant production are examined in this course. Agronomic characteristics, climatic and soil requirements, propagation methods nursery techniques, planting and maintenance are covered, with an emphasis on organic and integrated crop production methods. *Prerequisites: Completion of a course in Botany or Plant Biology, or equivalent background.*

GRK6064 Farm Management (Year 4)

Students develop a deep understanding of farm management skills and the implications of running a farming business. The course covers how to prepare budgets and business plans, analyze the financial aspects of running the business (financial statements and cash flow analysis) and ways to improve productivity in terms of total production. The course also addresses how to apply principles of sustainable economy in farm management.

Food Science & Technology

STF4027GK Food Raw Materials (Year 2)

Students explore key concepts in food raw materials and food related issues. Topics covered include the food chain and fundamental principles that underpin food sources, quality, production and processing. The structure, composition and nutritional quality of food commodities commonly consumed, e.g. cereals and cereal products, milk

and milk products, fish, meat and meat products, eggs, fats and oils, sugar and sugar products, beverages (alcoholic and nonalcoholic), fruit and vegetables are addressed. Current food related issues e.g. food labelling and modification processes, the role of supermarkets, food politics and environmental, technological & political influences on raw material production are also reviewed.

STG4029GK Introduction to Food Microbiology and Toxicology (Year 2)

This course unifies biology, microbiology and toxicology to better understand the sources of foodborne diseases. Information related to the toxic substances present in food as endogenous ingredients, as exogenous factors from the environment, as products of interaction of ingredients in the manufacture and as toxins of microorganisms is also covered. The course also explores the types of pathogenic microbes and toxicants present in food systems, (including water), their routes of exposure and modes of action, as well as their effects on human health and the environment.

STF5004GK Processing Technology (Year 3)

The course provides technical knowledge and understanding of industrial processing of food in a general and wide-ranging context while assessing and evaluating methods, equipment and control parameters. Topics covered include equipment selection, performance and suitability as well as process control systems.

ENH5013GK Applied Food Law (Year 3)

The principles, methods and legal requirements involved in foodstuff contaminants complaints are addressed. Students learn the EU legal framework which regulates the food industry, including available statutory defenses.

STF5020GK Nutrition (Year 3)

This course provides a sound, basic understanding of the role and function of macronutrients, micronutrients and energy balance in both the body and in population health. The effect of micronutrient deficiency and excessive intake is also explored. *NOTE: This course is intended for non-Nutrition majors.*

STF5021GK Statistical Techniques in Research (Year 3)

This course introduces students to statistics, covering key descriptive metrics, the concept of random variables, and both discrete and continuous distributions. Students learn how to apply statistical tests, interpret their results, and report findings accurately. Topics include evaluating basic descriptive statistics, working with uniform, binomial, and Poisson distributions, understanding the central limit theorem, and using normal distribution tests like Shapiro-Wilk.

STF5022GK Advanced Biochemistry: Enzymes & Metabolism (Year 3)

This course covers certain advanced aspects of biochemistry pertaining to biological systems and food science. Students gain an understanding of the structure and mechanism of action of enzymes and enzyme inhibitors. Topics covered include main cell metabolic pathways and their role in physiology as well as the metabolism of food macromolecules (carbohydrates, lipids, and proteins). Lab work with certain biochemical reactions which are important in food science is included.

STF5024GK Chemical Analysis of Food (Year 3)

Microbiology and hygiene are inextricably linked with the food industry. This module introduces the student to microorganisms, their nature and properties and how they relate to the environment and to food. Students learn causes and types of food poisoning, and understand the application of preservation to prevent food poisoning, including safe hygienic practices.

International Business

GRK4016 Principles of Law (Year 2)

Students learn the “fundamentals” of both the English and the Greek legal systems while also highlighting and addressing classic and contemporary issues that can be found within them. It provides an understanding of the nature

and role of law (international and national) in society and a basic understanding of the major classifications of law, as well as an awareness of the British, Greek and European constitutional background to the law. Students also become aware of the general principles of law of obligation and also learn to recognize the different types of business associations at an international and national level.

GRK4017A Management I (Year 2)

With this course, students are introduced to the managerial approach to organizational behavior. The student is encouraged to develop a critical appreciation of the structure, systems and operation of organizations, the process of management, the behavior of people at work and the influence of such systems on human behavior. The course is designed to give the student an understanding of the need for organizational effectiveness and the importance of the role of management as an integrating activity. It covers a wide range of issues from the individual level up to the macro-organizational level, emphasizing the complex inter/intra-relationships between individual and group behavior, organizational structure and organizational processes.

GRK4018A Marketing I (Year 2)

This course introduces students to theories, concepts and problems of marketing goods and services. Topics include promotion, placement and pricing strategies for products. In addition, students learn the role of research in marketing, by applying projective techniques, as well as the role branding plays in the marketing strategies. Building on the above, students are introduced to the tools, factors and concepts used by management in planning, establishing policies and solving marketing problems.

GRK4019A Business Environment I (Year 2)

In this class, students gain a systemic understanding of business. The students develop an appreciation of how economic, political, societal and technological variables influence organizational structure and the ability of companies to meet customer requirements in a profitable manner. In addition, the course contributes to the creation of a sound foundation of knowledge and understanding of the agricultural and food sector and its role in modern society and economy.

GRK4020A Principles of Food Science for Managers I (Year 2)

This course provides an overview of the basic food constituents and their importance in promoting health and preventing disease, as well as the reasons of food spoilage and the methods of prevention. The content of this module is developed around four interrelated knowledge blocks: The management of food production, Introduction to food science, Food spoilage and safety and Food processing.

GRK5019 Industrial Food Processing (Year 3)

This course provides basic technical knowledge and an understanding of industrial processing with an emphasis on methods, equipment and control parameters.

GRK5021A Quality in the Agro-Food Sector I (Year 3)

This course explores how people perceive food quality and the rules that ensure food products meet consumer expectations. Students learn about the key laws and standards that manufacturers must follow, as well as how consumer preferences and industry responsibilities shape product development. The course also helps students understand the roles and legal responsibilities of both manufacturers and consumers in maintaining food quality and safety.

GRK5022 Business Management (Year 3)

With this course, students gain a systemic understanding of how economic, political, societal and technological variables influence business structure and the ability of companies to meet customer requirements. Students also gain knowledge and understanding of the agricultural and food sector and its role in modern society and economy.

GRK5024A Consumer Behavior & New Product Development I (Year 3)

Students explore how consumers make decisions about selecting, purchasing, using, and evaluating food products and services. The course covers the internal and external factors that influence consumer choices and how these

insights can be applied to product development. Students also assess consumer and manufacturer needs, identify gaps in the food market, and propose the development of a new food product.

GRK5025A Financial Management I (Year 3)

The course reviews the financial institutions, sources of credit, criteria used to evaluate loan requests and financial accountability. Through various methods, including conducting research on an agro-business or food company, this course explores the application of a range of financial analysis and planning tools, asset evaluation and risk management, capital budgeting and capital structure.

Animal Science

GRK5929 Animal Welfare (Year 3)*

This course identifies and discusses controversial issues regarding the well-being of livestock as opposed to productivity and entrepreneurial goals of the animal industry. Topics discussed include living conditions, hygiene and diet. Students gain an understanding of why standards and actions are crucial and awareness of organizations and legislation involved in animal welfare.

GRK6044 Management of Livestock and Production (Year 4)*

Contemporary management practices that enhance livestock productivity are addressed in this course. Also covered are product quality assurance, livestock well-being, and cost-effective parameters. Students develop entrepreneurial skills related to livestock management. Issues related to food security, legislation, and genetics are also discussed.

GRK6046 Nutrition and Contemporary Feeding Systems - Cattle and Poultry (Year 4)*

Students learn fundamental concepts in digestion and metabolism. Nutrients and feeds required for livestock maintenance and production are identified and students have the opportunity to create feed firsthand. Principles of food analysis are also covered as well as the relation of nutrition to other constraints in animal production. Study visits to commercial factories and farms are included.

Digital Marketing

DMM5001A Creative Digital Marketing Communications I (Year 3)

Students gain a strong understanding of digital marketing principles and practices. The key elements of the digital marketing communication mix, including tools, media, and messaging strategies are addressed. Students develop creative skills to design and execute effective marketing campaigns, focusing on social media, product writing, critique, e-magazine journalism, and video/podcasting. Through hands-on learning, students explore different types of digital communication, mastering styling, writing, and visual storytelling to enhance their proficiency across key digital platforms. Writing and visual communication are integrated throughout the course, with students applying their skills in a portfolio-based assessment.

DMM5003A Digital Consumer Behavior I (Year 3)

This course explores the dynamic field of consumer behavior, examining the factors that shape how people make purchasing decisions. Students learn about the psychological, cultural, and social influences on consumer choices and how these insights apply to marketing management. The course covers consumer-brand relationships, advertising impact, self-identity, and social interactions through consumption. Upon successful completion, students are able to analyze modern consumer behavior approaches and evaluate the environmental, cultural, and social influences on both individual and group behavior.

BSP5083A Digital Analytics I (Year 3)

This course teaches how to measure, monitor, and evaluate digital marketing effectiveness. Web analytics, mobile and social media monitoring to assess company communications and customer interactions are explored. Students develop the skills to use social listening tools, track key performance indicators (KPIs), select measurement tools,

analyze reports, and optimize digital marketing efforts. Upon successful completion, students are able to assess digital analytics platforms and apply web and digital analytics skills to achieve measurable results.

BSP5090A Marketing Research Methods I (Year 3)

Students explore the role of market research in guiding business decisions, from launching new products to discontinuing failing ones. They learn to design and conduct marketing and consumer research studies, select reliable data collection methods, and analyze data using statistical and non-statistical techniques. The importance of primary and secondary research, ethical considerations, and effective academic writing are also explored. Students develop the skills to conduct research, present data, and create academic or practitioner research proposals.

BSP5097A Mobile and Social Media Marketing I (Year 3)

Students discover the growing influence of mobile and social media marketing and their role in modern communication strategies. With these platforms constantly evolving, students understand how they shape consumer behavior, transform information access, and create new marketing opportunities. The course explores how to engage audiences through social media, influence customer interactions, and navigate the mobile landscape, including app development and regulatory considerations.