

Exploring the Origins of the Mediterranean Diet in Crete Island

Credits	Language	Term	Year	Start Date	End Date
6	English	Summer	2017	July 11	July 31

Course Description:

Diets adopted by the Mediterranean populations have been a subject of interest since antiquity, with more recent investigations demonstrating their numerous health benefits. The Rockefeller Foundation's study in 1940s and the Seven Countries Study in 1950s both highlighted the Cretan diet as a palatable primarily plant-based dietary pattern with distinct differences compared to the western-type diet and a strong link to the maintenance of good health. The local diet of Crete Island is what we know today as the Mediterranean diet, acknowledged as an Intangible Cultural Heritage of Humanity by UNESCO and proposed as one of the three major health promoting dietary patterns in the 2015-2020 Dietary Guidelines for Americans. The 4-week educational program «Exploring the Origins of the Mediterranean Diet in Crete Island» aims to provide students the opportunity to study the Mediterranean diet in its place of origin, along with sustainable food production and consumption patterns, emphasizing on traditional Mediterranean practices.

During the first days of the course, students will visit Athens, the capital of Greece, where they will participate in lectures, cooking classes and educational activities about the history, evolution, culinary aspects and health benefits of the traditional Greek lifestyle. For the two core weeks of the program, educational activities will take place in Crete Island. While there, students will explore the remnants of the ancient Minoan civilization, as well as learn about landmark studies carried out in the island, as a means to familiarize with the history and evolution of the Cretan diet and lifestyle. The program will focus on the fundamental principles of the Mediterranean diet through lectures regarding its health benefits, and workshops on the production and nutritional properties of wine and olive oil, both fundamental parts of the Cretan diet. In line with the island's rich food production sector, lectures and educational activities will address the cultivation of citrus fruits, green leafy vegetables and herbs, and the production of honey, traditional dairy products and spirits. Students will also be exposed to the complex concept of food systems and its association with culture, public health, economy and the environment through the example of the agriculture-based diet and economy of Crete Island as well as the characteristics of environmentally friendly and sustainable food production with emphasis on organic agriculture and livestock applications.

During the 3-week course, some days will be devoted to theoretical lectures and discussion sessions on the scientific and cultural themes of the day combined with workshops, experiential activities or studying. Other days will be devoted entirely to field trips and interactive educational activities, including visits to monumental sites, observation of Cretan lifestyle practices, demonstrations of traditional and modern cultivation and food production procedures and techniques, cooking classes with emphasis on traditional Cretan products, tasting of local Mediterranean recipes, as well as collective sports activities in nature.

Pre-Requisites:

1. Instructor's consent
2. Minimum GPA 2.5

Objectives:

1. Become familiar with the concept of the Mediterranean lifestyle (with emphasis on the traditional Cretan lifestyle) as a holistic way of living, its history and its evolution throughout time.
2. Become aware of the ancient Greek (Minoan) civilization, recognize its influence on modern European civilizations and be able to identify its differences compared to Western civilizations.
3. Recognize the importance of olive oil, wine, fruits, vegetables and herbs in the traditional Cretan diet, become familiar with their cultivation-production-processing techniques, and critically understand their cultural importance, nutritional value and health properties.

4. Gain competencies in traditional Cretan lifestyle and cultural practices, such as the design of nutritionally balanced non-meat meals, the application of traditional food production, preservation and cooking techniques, traditional rural activities, folklore dances and lira playing.
5. Be able to identify the unique characteristics of the Cretan diet and its differences compared to other dietary patterns adopted around the world (e.g. the Western type diet).
6. Obtain the skills to evaluate, compare and properly select foods according to their nutritional value, degree of processing, locality, seasonality and eco-friendliness.
7. Critically understand and interpret the available scientific data regarding the beneficial effects of the Cretan diet on health and disease.
8. Be able to identify the unique characteristics of organic food production (legislation, production techniques and standards) and its differences compared to conventional food production.
9. Acknowledge the multidimensional role of food systems, i.e. environmental (both positive and negative), nutritional (food security and public health), developmental (development of sustainable rural communities) and social (preservation of tradition, family structures and culinary heritage).
10. Become aware of the concept of sustainable development, as a process for meeting human development goals while maintaining the ability of the ecosystem to continue to provide the natural resources upon which the economy and society depend.

Course Materials:

- Lectures, notes and other files relevant to the course's learning objectives (printed and electronic material).
- Student portfolio (course overview and schedule, summary of learning outcomes, educational tasks, etc.)
- Leaflets relevant to the course's educational and cultural activities (e.g., Athens-Attica Guide and Gastronomy, Ministry of Tourism, Greek National Tourism Organisation).
- Research papers relevant to the course's learning objectives (e.g., Bach-Faig A et al. Mediterranean diet pyramid today. Science and cultural updates. Public Health Nutr. 2011 Dec; 14 (12A): 2274-84.).

Instructors:

Labros Sidossis, PhD, Department of Kinesiology and Health, School of Arts and Sciences, Rutgers University.

Course Requirements:

Coursework	Due Date	Possible Points
Course preparation assignments (studying course materials)	July 10 th	10 points
Participation (attention and interest in the course's activities) & Professionalism (professional behavior, teamwork and communication)	Throughout the course	30 points
Reflective Discussion and Portfolio	July 27 th	30 points
Project *	July 27 th (presentations) & August 14 th (written assignments)	30 points
Total		100

* Group presentation for all students plus individual written assignment for graduate students.

Portfolio Instructions:

Students will have a portfolio of evidence in which they will record all the information necessary to demonstrate the completion of the specific objectives and any other relevant information. More specifically, students will describe and evaluate their experiences in Greece, as well as undertake short educational activities associated with the program's topics, in order to help cover the program's main learning objectives

and assess the knowledge, the skills and the competencies they obtained. The portfolio will be completed through the PAL (Peer Assisted Learning) method. The term PAL essentially means that each student will work in collaboration with at least one other student in order to develop their knowledge and skills.

Project Instructions:

All students are expected to work in small groups (4-5 students) to prepare a 15-minute presentation related to the course's learning objectives. Graduate students are also expected to complete an individual written assignment (2000 words) related to the course's learning objectives. The presentation and written assignment topics will be assigned at the beginning of the course.

Grading:

There are 100 total points for the course.

100-90=A	89-85=B+	79-75=C+	69-65=D+	<60=F
	84-80=B	74-70=C	64-60=D	

Preliminary Schedule:

Day	Educational activity	Topic	Objectives met	Contact hours*
	• Pre-departure orientation	• «Introduction to the course» (basic description & requirements)	-	4
Jul 10 th	• Travel day	• Depart USA	-	-
Jul 11 th	• Arrival in Greece • Lecture • Welcome dinner	• «The concept of Mediterranean Diaita (Diaita = Healthy Lifestyle)»	1, 3, 5, 7	4
Jul 12 th	• Lecture • City tour & sightseeing	• «Introduction to the course» (itinerary, schedule, academics, projects, etc.) • Exploring metropolitan Athens	1	5
Jul 13 th	• Visit to the Organization Earth foundation • Cooking class • Lecture	• Mediterranean meals & culinary tradition • «Food production, sustainable agriculture and collective culinary activities»	1, 6, 7, 9, 10	6
Jul 14 th	• Visit Parthenon and the Acropolis museum • Lecture	• Greek civilization • «Connecting ancient history with contemporary way of living»	1, 2	5
Jul 15 th	• Free day	• Free day to explore the city & study	-	-
Jul 16 th	• Travel to Crete Island • Visit the Mediterranean Agronomic Institute of Chania (MAIC) • Lecture	• Guided tour of the MAIC • «Introduction to food production» • Free day to explore the city & study	1, 9, 10	4
Jul 17 th	• Visit to a local library • Lecture	• Study historical texts and studies on the Mediterranean diet • «The origins of the Mediterranean diet»	1, 5, 6, 7	6
Jul 18 th	• Visit to a vineyard – winery & an olive grove	• Principles of the Cretan diet • Production, nutritional value &	1, 3, 5, 6, 7	6

	<ul style="list-style-type: none"> – oil production establishment • Discussion session 	health benefits of olive oil & wine		
Jul 19 th	<ul style="list-style-type: none"> • Study day with instructors' supervision 	<ul style="list-style-type: none"> • Overview of student portfolios & projects 	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	4
Jul 20 th	<ul style="list-style-type: none"> • Visit Knossos • Guided tour in archaeological sites • Lecture 	<ul style="list-style-type: none"> • Myths & legends of Crete island • «History and lifestyle aspects of the Minoan civilization» 	1, 2	5
Jul 21 st	<ul style="list-style-type: none"> • Visit to local farms & food production establishments • Lecture 	<ul style="list-style-type: none"> • Contact & interviews with local producers & community members • «Link between food production, culture & economy» 	1, 9, 10	5
Jul 22 nd	<ul style="list-style-type: none"> • Free day 	<ul style="list-style-type: none"> • Free day to explore the city & study 	-	-
Jul 23 rd	<ul style="list-style-type: none"> • Free day 	<ul style="list-style-type: none"> • Free day to explore the city & study 	-	-
Jul 24 th	<ul style="list-style-type: none"> • Walking tour & hiking in Cretan paths • Lecture 	<ul style="list-style-type: none"> • Exploring Cretan scenery and wild flora • «The value of wild plants & herbs in the Mediterranean diet» 	1, 3, 5, 6, 7	5
Jul 25 th	<ul style="list-style-type: none"> • Visit to an organic food plantation • Participation in agricultural activities • Lecture 	<ul style="list-style-type: none"> • Basic principles & practices of organic agriculture • «Organic vs conventional food production: health & environmental impact» 	1, 3, 4, 8, 9, 10	6
Jul 26 th	<ul style="list-style-type: none"> • Study day with instructors' supervision 	<ul style="list-style-type: none"> • Overview of student portfolios & projects 	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	4
Jul 27 th	<ul style="list-style-type: none"> • Student presentations & portfolios 	<ul style="list-style-type: none"> • Reflection and facilitated discussion of the program 	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	6
Jul 28 th	<ul style="list-style-type: none"> • Visit Milia village • Guided tour 	<ul style="list-style-type: none"> • Exploring traditional Cretan culture and lifestyle 	1	4
Jul 29 th	<ul style="list-style-type: none"> • Cooking class • Lecture 	<ul style="list-style-type: none"> • «Culinary aspects of the Cretan diet» • Preparation and tasting of a traditional Mediterranean meal 	1, 3, 4, 5, 6, 7	6
Jul 30 th	<ul style="list-style-type: none"> • Collective games & activities • Folklore dance lesson 	<ul style="list-style-type: none"> • Mediterranean conviviality, & socializing • Alternate physical activity 	1	5
Jul 31 st	<ul style="list-style-type: none"> • Travel day 	<ul style="list-style-type: none"> • Return to USA 	-	-
Aug 14 th	<ul style="list-style-type: none"> • Student written assignments** 	<ul style="list-style-type: none"> • Due date for the written assignments (electronic delivery) 	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	-
Total				90

* Lectures, discussion sections, and formal meetings with the students to present information or to review information, process and discuss what has been experienced in the field, etc.

** For graduate students only.