2019 Study Abroad

Mediterranean Diet and Health, NSC455SA/NSC-455H

Syllabus

May 13-14, 2019 - University of Arizona, Tucson, AZ (in person and on line)

May 18-June 15, 2019 - Verona, ITALY

CONTACTS:

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Credit hours: 6 units; 96 contact hours. Available for Honor Credits.

Attendance: Mandatory. Attendance will be recorded.

COURSE DESCRIPTION

The Mediterranean dietary pattern has a well-established beneficial role in health promotion. Epidemiologic studies reveal the protective role of adherence to this pattern on overall cancer incidence and mortality, prevention of obesity, type II diabetes, and cardiovascular diseases. On November 17, 2010, UNESCO recognized this diet pattern as an Intangible
Cultural Heritage of Italy, Greece, Spain and Morocco, thus recognizing this Mediterranean component of life style as a contribution to the world. Objectives of this Summer Program include:

1) Provide students with information about the health benefits of foods associated with a Mediterranean diet and for the prevention of chronic diseases;
2) Review and discuss the influence of bioactive compounds present in Mediterranean foods on metabolic pathways;
3) Provide students with an opportunity to learn about the food industry in Italy, and dietary patterns of the Mediterranean area;
4) Acquire hands-on experience with food preparation supervised by local food instructors;
5) Experience the cultural diversity and language of Italy and influence of Mediterranean food culture on health and lifestyle.

REQUIREMENTS
This class is designed for sophomore, junior and senior as well as non-University of Arizona undergraduate students with a background in nutrition, health, biological, physiological, biomedical sciences or equivalent general education background (i.e. public health, sociology, family studies, etc). Academic requirements may include NSC 170C1 (formerly NATS 104) - Nutrition, Food and You, or NSC 101 - Introduction to Human Nutrition, or equivalent courses in nutrition, health, physiological, biological, biomedical sciences, or equivalent general education courses. Students are encouraged to inquire about eligibility.

MINOR IN NUTRITIONAL SCIENCES
This class is approved for completing a minor in Nutritional Sciences. For more information, please contact: Michelle Mendoza, Senior Advisor, Department of Nutritional Sciences-Ins Office, Shantz Bldg; Tel. (520) 621-2017; Email: mnmendoz@email.arizona.edu.

FOOD PREFERENCES AND ALLERGIES
As students of the topic and future professionals who may work with people who make different food choices, the program encourages students to learn how various foods are/can be prepared and integrated into a diet. However, we respect food preferences and are also concerned with food allergies. Therefore, it is imperative that students inform instructors about any food preferences/allergies, so that alternative meals can be prepared when with the program.

SCHOLARSHIPS
Four scholarships ranging from $500 to $1,000 will be made available to students attending the Mediterranean Diet and Health Study Abroad Program in Verona, Italy. Scholarships will be awarded based on travel needs and academic accomplishments. Any student accepted into the program, regardless of areas of academic major/minor and seniority, is eligible.

READINGS AND TEXTBOOKS
1. Selected readings will be posted on D2I by Dr. Romagnolo and will consist of original research articles, review articles, monographs, and book chapters.
PROGRAM AND ASSIGNMENTS

Part 1. May 14-May 15, 2019. Class meetings will take place on the campus of the University of Arizona, 2:30-5:00 PM. Online instruction will be available for students not on campus.

WEEK 1:


May 14. The role of Mediterranean diet in the prevention of obesity, type 2 diabetes, and cardiovascular diseases, and relation to morbidity and mortality.

May 15-17, NO CLASS-TRANSFER TO ITALY


Classroom meetings will be from 9:00 AM to 2:00 PM and excursions will last from 9:00 AM to 5:00 PM. Each classroom activity will include an introductory lecture by Dr. Romagnolo or a guest speaker followed by food presentations, demonstrations, preparation, and tasting organized by local food experts. Lunch will be served on-site during class-room days or will be provided during program excursions.

May 18. (SATURDAY) Arrive to housing center, Residence Adige (http://www.residenceadige.it). Registration and moving into residence suites (housing of 2 students/suite, equipped of kitchen plus cooking utensils, microwave, fridge, TV, and private bathroom, WiFi-internet connection). Morning buffet-breakfast and access to fitness room are included in the program costs.

May 19. (SUNDAY) Opening Event, 6:00 PM. Bus transfer to reception. Presentation of program and cooking staff. Group dinner.

WEEK 2:


May 21. Class: Mediterranean diet and regulation of metabolic pathways. With the chef: morning Italian conversation and refreshments; cooking lesson on vegetables and lunch. Late afternoon: guided visit to historic downtown Verona.

May 22. Class: carbohydrates and diet. Overview of cereal-based foods, relations to gastro-intestinal health; cereal grain origins and cultivars of the Mediterranean area, wheat, barley, and rice. With the chef: morning Italian conversation with refreshments; cooking lesson and lunch.

May 23. Class: Mediterranean diet and metabolic syndrome. With the chef: morning Italian conversation and refreshments; cooking lesson on dairy products and lunch. Guided group visit to municipality of Verona (Sala del Consiglio, Palazzo Barbieri). Meeting with City of Verona Arts and Culture representatives.
May 24. **EXAM 1.** Lunch on your own and free weekend.

**WEEK 3:**

May 27. **Class:** Mediterranean diet and cancer prevention.
   With the chef: morning Italian conversation with refreshments; cooking lesson, vegetable and meat dish preparation and lunch.
   Group visit to **Museo di Castelvecchio**.

May 28. **Class:** Fish and health. Visit to **Lake Garda** and boat/fish tour and lunch.

May 29. **Class:** Gastrointestinal microbiome and health benefits.
   With the chef: morning Italian conversation with refreshments; cooking lesson on pasta and lunch.

May 30. **Class:** Mediterranean fats and oils, olive oil, bioactive components, and health effects.
   Visit to **pasta plant** and lunch.

May 31. **EXAM 2.** Lunch on your own and free weekend.

**WEEK 4:**

June 3. **Class:** phenolic compounds.
   With the chef: morning Italian conversation with refreshments; cooking lesson and lunch.
   Group visit to **Archeological Museum, Teatro Romano**.

June 4. **Class:** Mediterranean vegetable vs animal protein and health perspective.
   With the chef: morning Italian conversation with refreshments; cooking lesson, fish dish preparation and lunch.
   **Conviviality group dinner.**

June 5. **Class:** Dairy and health. Visit to **cheese plant**, presentation of processing procedures and storage. Cheese tasting and lunch.

June 6. **Class:** Mediterranean marine ecology and fish, fish oils, epidemiological studies and health benefits.
   Visit to **fishing town**. Tour of historic sites and lunch.

June 7. **Class:** Oils and nuts. Lunch on your own and free weekend.
WEEK 5:

June 10. Class: Mediterranean food components and impact on inflammation, antioxidant load, and ageing process.
With the chef: Morning Italian conversation with refreshments; cooking lesson with legumes and lunch.
Group visit to Museo Maffeiano/Arena.


June 12. Class: Mediterranean herbs and spices. Bioactive compounds and health benefits. With the chef: Morning Italian conversation with refreshments; cooking lesson with herbs and lunch.

June 13. Class. Fruits and berries. With the chef: Morning Italian conversation with refreshments; cooking lesson with fruits and berries.

With the chef: morning Italian conversation with refreshments; cooking lesson and lunch.

Afternoon: FINAL.
Evening: closing event and dinner.

June 15. Farewell and Departure

June 30. PAPER due (*)

July 5: Self-study** due.

(*) The paper will be 5 pages long, double space (1” margins) and prepared according to scientific standards of the Journal of Nutrition (www.nutrition.org) and address the relationships between the Mediterranean diet and one of the health problems selected among those presented in class. (i.e. obesity, cancer, diabetes, inflammation, etc). The paper should be referenced (not included in the 5 pages limit) and may have figures and tables, if necessary, also not included in the 5 pages limit. The manuscript should be submitted electronically to Dr. Romagnolo (donato@u.arizona.edu).

(**) The self-study involves the preparation of a short video/slide presentation (instructions will be provided) focusing on the scientific and individual/group cultural experience while with the program.

On site contributions will include presentations by guest lectures from The University of Arizona, faculty from The University of Verona, and representatives of food industry. Writing emphasis and Honors assignment options are available for qualifying students.

EXAMINATIONS

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### Participation and Self-study

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### Final Exam

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**TOTAL POINTS**

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