2018 Study Abroad
Mediterranean Diet and Health, NSC455SA/NSC-455H
Syllabus

May 14-15, 2018 - University of Arizona, Tucson, AZ (in person and online)
May 19-June 17, 2018 - 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 N SC 101- Introduction to Human Nutrition, or equivalent courses in nutrition, health, physiological, biological, biomedical sciences, or equivalent general education courses.

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 in 2018 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.

INTERNSHIPS
Internships with selected food producers may be available at the end of the program. Please, check with Dr. Romagnolo for details and availability.

READINGS AND TEXTBOOKS
1. Selected readings will be posted on D2l 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, 2018. 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 15. The role of Mediterranean diet in the prevention of obesity, type 2 diabetes, and cardiovascular diseases, and relation to morbidity and mortality.

May 16-18, 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 19. (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 is included in the program costs.

May 20. (SUNDAY) Opening Event, 6:00 PM. Bus transfer to reception. Presentation of program and cooking staff. Group dinner.

WEEK 2:


May 22. 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 23. 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 24. Class: Mediterranean diet and metabolic syndrome. With the chef: morning Italian conversation and refreshments; cooking lesson on dairy products and lunch. Guided visit to municipality of Verona. Meeting with City of Verona arts and culture representatives.

May 25. EXAM 1. Lunch on your own and free weekend.

WEEK 3:

May 28. Class: Mediterranean diet and cancer prevention. With the chef: morning Italian conversation with refreshments; cooking lesson, vegetable and meat dish preparation and lunch.


May 30. Class: Gastrointestinal microbiome and health benefits. With the chef: morning Italian conversation with refreshments; cooking lesson on pasta and lunch.


June 1. EXAM 2. Lunch on your own and free weekend.
WEEK 4:

June 4. Class: phenolic compounds.  
With the chef: morning Italian conversation with refreshments; cooking lesson and lunch.

June 5. 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.


Visit to fishing town. Tour of historic sites and lunch.

June 8. Class: Oils and nuts. Lunch on your own and free weekend.

WEEK 5:

June 11. 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.


June 13. 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 14. Class. Fruits and berries. With the chef: Morning Italian conversation with refreshments; cooking lesson with fruits and berries.

June 15. Class: Regional Mediterranean foods.  
With the chef: morning Italian conversation with refreshments; cooking lesson and lunch.

June 16. 9:00 AM: FINAL. Group lunch.  
Evening: closing event and dinner.

June 17. 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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**GRADES**

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