

Master's degree

MEDITERRANEAN DIET: FOOD, CULTURE AND CULINARY INNOVATION

Faculty of Pharmacy and Food Sciences

University of Barcelona



TMC

TORRIBERA MEDITERRANEAN CENTER

FOOD, HEALTH, CULINARY INNOVATION



GENERAL INFORMATION

Qualification awarded: Master's degree (UB-specific degree)

Awarding body: University of Barcelona

Center responsible: Faculty of Pharmacy and Food Sciences

Course directors:

- Màrius Rubiralta Alcañiz, PhD (Faculty of Pharmacy and Food Sciences, University of Barcelona)
- Ramon Estruch Riba, MD, PhD (Faculty of Medicine and Health Sciences, University of Barcelona)
- Michael Sperling, PhD (Office of the Provost, The Culinary Institute of America)

Number of credits: 60,00

Length of course (in academic years): 1

Mode of delivery: Face-to-face

Language: Spanish

Enrolment fee: 6.900,00 € + taxes

Schedule*: Monday to Friday from 3 to 8 PM.

Length of the course*: January 9th 2019 – June 28th 2019

Background: This master's degree is an outgrowth of the newly launched Torribera Mediterranean Center (TMC), a joint project of the University of Barcelona and The Culinary Institute of America to advance scholarship around the traditional, healthy Mediterranean Diet and Mediterranean food and culinary cultures, as well as the contributions such scholarship can make to a variety of fields globally.

*There may be slight changes on the dates and schedule.

OBJECTIVES AND ADMISSION

Learning objectives: To deepen knowledge of the historical and anthropological precedents, the birth of the global concept of the Mediterranean diet and the culinary cultures of the Mediterranean area as a healthy and sustainable dietary model. To understand the effects of the Mediterranean diet on food products, culinary techniques, sustainability, bioeconomy and communication patterns. To approximate the professionals of food-related areas to the global Mediterranean model.

Career opportunities: Window opportunity of the Mediterranean diet in

- Agroalimentary industry
- Food industry
- Food services
- Environmental companies
- Nutrition and public health
- Health and nutrition communication

- Education
- Tourism and gastronomy sector
- Public services. Policies.

Admission requirements:

- Bachelor's degree, Pre-EHEA degree or diploma in food-related areas, including humanities, life sciences, sociology, communication and education.
- Curriculum.

Admission for applicants not holding a degree qualification: Students who are not university graduates may be admitted on this course. These students will be eligible for a university extension course certificate. Information regarding the entry requirements in this case can be obtained from the course coordinators.

Pre-enrolment period: July 2nd – October 19th 2018

[Pre-enrolment webpage](#)

FURTHER INFORMATION

FACULTY OR SCHOOL WHERE THE COURSE IS TAUGHT

Name of individual or institution: Campus de l'Alimentació de Torribera and Escola de Restauració de Santa Coloma de Gramenet (Grameimpuls).

Address: Recinte Torribera. Prat de la Riba, 171. 08921 Santa Coloma de Gramenet

Webpage: <http://www.ub.edu/campusalimentacio/ca/>

FOR FURTHER ENQUIRIES

Name of individual or institution: Torribera Mediterranean Center (TMC)

Address: La Masia building. Recinte Torribera. Prat de la Riba, 171. 08921 Santa Coloma de Gramenet.

Master's degree Webpage:
http://www.ub.edu/campusalimentacio/ca/Master_Mediterranean_Diet_Food_culture_culinary_innovation.html

Telephone: +34 93 403 19 65

Email address: tmc.ub.cia@ub.edu

SYLLABUS

PART 1. HISTORY, CULTURE, ANTHROPOLOGY AND GASTRONOMIC SYSTEMS OF MEDITERRANEAN AREA

MODULE 1.1. MEDITERRANEAN DIET AS A HUMAN FOOD HERITAGE (2 ECTS)

1. GEOGRAPHIC AND CULTURAL CONCEPT OF THE MEDITERRANEAN
2. THE HISTORY OF FOOD IN THE MEDITERRANEAN

3. THE EVOLUTION OF GASTRONOMIC TERMINOLOGY IN THE MEDITERRANEAN
4. FOOD AND RELIGION IN THE MEDITERRANEAN
5. ANTHROPOLOGY AND FOOD IN THE MEDITERRANEAN

MODULE 1.2. MEDITERRANEAN GASTRONOMIC SYSTEMS (2 ECTS)

1. MEDITERRANEAN DIVERSITY IN FOOD SYSTEMS
2. SOCIOCULTURAL DIMENSION OF MEDITERRANEAN GASTRONOMIC SYSTEMS.
3. ECONOMICS OF THE MEDITERRANEAN FOOD SYSTEM
4. THE EROSION OF THE MEDITERRANEAN GASTRONOMIC HERITAGE.
5. THE GLOBAL CONCEPT OF THE MEDITERRANEAN DIET.

PART 2. FOOD PRODUCTS, NUTRITION, DIET AND GASTRONOMIC SCIENCE

MODULE 2. MEDITERRANEAN FOOD PRODUCTS (3 ECTS)

1. CLASSIFICATION OF PRODUCE AND PRODUCTS.
2. NUTRITIONAL COMPOSITION OF MAIN FRESH FOODS AND BASIC PRESERVES.
3. BIO-ACCESSIBILITY, BIODISPONIBILITY AND METABOLISM OF MAIN NUTRIENTS
4. SUITABLE COOKING TREATMENT ACCORDING TO THE NATURE OF COMPOSITION.
5. SENSORIAL ANALYSIS.

MODULE 3. NUTRITION AND GASTRONOMY (6 ECTS)

1. HUMAN NUTRITION: RELATIONSHIP BETWEEN NUTRITION AND HEALTH
2. COOKING AND NUTRITIONAL SCIENCE
3. NUTRITION, DIET AND GASTRONOMY
4. DIETARY REFERENCE STANDARDS
5. RESEARCH AND INNOVATION FOR TOMORROW'S NUTRITION & FOOD SYSTEMS
6. MARKET-CREATING AND OPEN INNOVATION IN MEDITERRANEAN GASTRONOMY
7. MALNUTRITION AND OVERNUTRITION: DEFINITIONS.

PART 3. CULINARY TECHNIQUES AND MENUS

MODULE 4. GASTRONOMIC DEVELOPMENT OF CULINARY TECHNIQUES (4 ECTS)

1. MEDITERRANEAN CULINARY SYSTEMS: THE CULINARY TREATMENT OF FAT; FROM GARUM TO EMULSIFIED FOAMS, FROM GAZPACHO TO TABOULÉ
2. PAIRING BEANS AND CEREALS; FROM ANCESTRAL NEEDS TO CONTEMPORARY ALIMENTARY PATTERNS.
3. DAIRY PRODUCTS. LOW FAT FERMENTS. CALCIUM INTAKE RELATED TO FAT CONSUMPTION. PROBIOTICS.
4. VEGETAL FIBER & PROTEINS. TEXTURIZING WITHOUT FAT.
5. THE OLIVE OIL IMPORTANCE IN THE MEDITERRANEAN DIET. THE ROLE OF OIL IN GASTRONOMY. FROM FREEZING TO FRYING AT 160°. HOW TEMPERATURE AFFECTS QUALITY.

MODULE 5. INTERPRETING THE MEDITERRANEAN DIET COOKBOOKS (3 ECTS)

1. REFERENCE COOKBOOKS OF THE MEDITERRANEAN CULTURES
 - A. HISTORY OF THE COOKBOOKS.
 - B. EVOLUTION OF COOKBOOK IN THE MEDITERRANEAN REGION
 - C. THE COOKBOOK OF THE MEDITERRANEAN DIET.
2. DIGITAL TECHNOLOGIES AND THE NEW CONCEPT OF COOKBOOK.

MODULE 6. MEALS AND RECIPES (3 ECTS)

1. ALIMENTARY PLANNING OF WHOLE CYCLE.

2. ALIMENTARY WASTE PREVISION. PLANNING AS THE KEY TO SAVE (MONEY, ENERGY, TIME).
3. RESOURCES SAVING AND SUSTAINABILITY
4. MEDITERRANEAN DIET AND FISH CONSUMPTION
5. THE ROLE OF MEAT IN THE MEDITERRANEAN DIET

PART 4. NUTRITION AND HEALTH: NEW APPROACH ON NUTRITIONAL GASTRONOMY

MODULE 7. PREVENTION OF CHRONIC DISEASES AND AGING (4 ECTS)

1. MEDITERRANEAN DIET, AGING AND NEURO-DEGENERATIVE DISEASES
2. NUTRITION IN THE PREVENTION, DEVELOPMENT AND EVOLUTION OF PREVALENT CHRONIC DISEASES: OBESITY, DIABETES, HYPERTENSION
3. MEDITERRANEAN DIET AND CARDIOVASCULAR DISEASES, COHORT AND INTERVENTION STUDIES (PREDIMED STUDY)
4. NUTRITIONAL AND GASTRONOMIC STUDIES RELATED TO CANCER AND NEUROMOTOR DISEASES: AMYOTROPHIC LATERAL SCLEROSIS (ALE) EXAMPLE

MODULE 8. NUTRITION AND PERSONALIZED DIET (3 ECTS)

1. FACTORS FOR THE ANALYSIS AND DEFINITION OF THE PERSONAL ALIMENTARY PATTERN (PAP)
2. KEY FACTORS FOR THE DEFINITION OF PAP.
3. BASAL DIETS DERIVATIONS DEPENDING ON PAP.

MODULE 9. MEDITERRANEAN LIFESTYLE: PHYSICAL ACTIVITY AND PSYCHOSOCIAL ASPECTS (3 ECTS)

1. MEDITERRANEAN LIFESTYLES
2. CONCEPT OF LONGEVITY IN THE MEDITERRANEAN AREA: EXEMPLES OF SPECIAL LONGEVITY ANALYSIS OF THE CHARACTERISTICS OF THE GLOBAL AREAS WITH A MAJOR LONGEVITY
3. NUTRITION AND PHYSICAL ACTIVITY
4. PSYCHOSOCIAL ASPECTS
5. FOOD-RELATED RITUALS IN MEDITERRANEAN CULTURES
6. ROLE OF THE LIFESTYLE

PART 5. MEDITERRANEAN BIOECONOMY & SUSTAINABILITY: FOOD, TOURISM AND DIET

MODULE 10. MEDITERRANEAN BIOECONOMY: PROXIMITY AND SUSTAINABILITY (4 ECTS)

1. SUSTAINABLE FOOD CONSUMPTION AND PRODUCTION. SEASONAL PRODUCTS.
2. ENVIRONMENTALLY SUSTAINABLE FOOD SYSTEMS. BALANCED RICH ENVIRONMENTS VERSUS MONOCULTIVES. ORGANIC PRODUCTION. BIODYNAMIC FOOD PRODUCTION PRINCIPLES.
3. ENVIRONMENTAL SUSTAINABILITY OF MEDITERRANEAN DIET. WORLDWIDE COMMODITIES TRADE VERSUS LOCAL ENVIRONMENT PRODUCTION. CARBON FOOTPRINT. POLYMER PRODUCTION OF FOOD PACKAGING.
4. SUSTAINABLE FOOD SYSTEMS AND DIETS. ANIMAL PRODUCTS VERSUS VEGETABLES. THE FUTURE OF PROTEIN CONSUMPTION. GREENHOUSE EFFECT AND CONTAMINATION OF AQUIFERS.
5. IMPLEMENTATION OF INTEGRATED PRODUCTION SYSTEMS. CIRCULAR ECONOMY PRINCIPLES ACROSS THE MEDITERRANEAN.
6. FOOD SAFETY.
7. SUSTAINABILITY OF THE MEDITERRANEAN DIET: INDICATORS.

8. MARE NOSTRUM. THE CHALLENGE OF RAISING INSTEAD OF FISHING. EU BLUEMED INITIATIVE.
9. CONTEMPORARY CHALLENGES OF THE FOOD INDUSTRY. THE ATOMIZATION OF MARKETS VERSUS GENERAL PRODUCTION. PERSONAL ALIMENTARY PATTERN (PAP).

MODULE 11. ENVIRONMENT: WATER, CLIMATE CHANGE AND BIODIVERSITY (3 ECTS)

1. CHARACTERIZATION OF THE MEDITERRANEAN ENVIRONMENTS: CLIMATE, SOILS, VEGETATION, AGRICULTURE, WATER...
2. HISTORY LESSONS ABOUT AGRICULTURE: RAINFED CROPS, RAIN FARMS, IRRIGATION
3. WATER IN THE MEDITERRANEAN: CONVENTIONAL AND NON-CONVENTIONAL RESOURCES. OFFER AND DEMAND
4. MODERN TOOLS: CIRCULAR ECONOMY, CLIMATE CHANGE AND OTHER CONCEPTS. THE NEXO WATER-POWER ENERGY-FOOD IN RELATION TO THE ENVIRONMENT
5. ANTHROPIC PRESSURES: URBANIZATION, TOURISM, INTENSIVE AND PROXIMITY AGRICULTURE, THEME PARKS, LEISURE FACILITIES. PRESSURES ON THE LANDSCAPE, NATURAL ENVIRONMENT, WATER, SOILS AND ECOSYSTEMS
6. FOOD PRODUCTION RELATED TO MEDITERRANEAN ECOSYSTEMS. THE SOIL-PLANT-ATMOSPHERE CONTINUUM (*SPAC*) CONCEPT
7. ANALYSIS OF HAZARDS AND RISK MANAGEMENT IN AGRICULTURAL PRODUCTION. WATER, SOILS, ATMOSPHERE, AGRICULTURAL PRODUCTS, OTHER CROPS, LIVESTOCK

MODULE 12. TOURISM, GASTRONOMY AND CULTURE IN THE MEDITERRANEAN REGION (4 ECTS)

1. TOURISM: CONCEPT, POLICIES AND CULTURAL, SOCIAL AND ECONOMIC INFLUENCES. FUTURE SCENARIOS
2. THE GASTRONOMY AS A INTANGIBLE CULTURAL HERITAGE
3. ANTHROPOLOGY AND ECOLOGY IN THE DEFINITION OF MEDITERRANEAN GASTRONOMY.
4. GASTRONOMY AND TOURISM; GASTRONOMY AND TERRITORY. HOW GASTRONOMIC TOURISM CAN HELP TO TERRITORIAL DEVELOPMENT. ELEMENTS TO BE INCLUDED IN THE GASTRONOMIC TOURISM EXPERIENCE: PLACES TO COMPREHEND, TASTE AND BUY
5. THE GOVERNANCE OF GASTRONOMIC TOURISM. IDENTIFICATION OF THE DIFFERENT AGENTS: FROM THE PUBLIC SECTOR TO THE PRIVATE SECTOR, FROM THE PRIMARY SECTOR TO THE TERTIARY SECTOR, FROM COMPANIES TO NGOS. HOW TO WORK ON NETWORK AND HOW MAKE STRATEGIES AND POLICIES FOR THE FUTURE.
6. MARKETING OF GASTRONOMIC TOURISM. TOOLS FOR GASTRONOMY AND TOURISM PROMOTION AND COMMUNICATION. ONLINE MARKETING. INFLUENCERS AND FOODIES. MEDIA. COMMERCIAL CHANNELS
7. OIL AND WINE, A WAY TO BE IN THE MEDITERRANEAN. THE CULTURAL ITINERARIES OF THE EUROPEAN COUNCIL. OLIVE TREE AND WINE ROUTES

PART 6. MEDITERRANEAN DIET: KNOWLEDGE CREATION AND DISSEMINATION

MODULE 13. MEDITERRANEAN DIET: KNOWLEDGE CREATION AND DISSEMINATION (4 ECTS)

1. MEDITERRANEAN DIET: KNOWLEDGE CREATION AND MANAGEMENT
 - A. GASTRONOMIC TERMINOLOGY
 - B. GASTRONOMIC KNOWLEDGE CLASSIFICATION
 - C. COMPUTATIONAL GASTRONOMY
2. MEDITERRANEAN DIET: KNOWLEDGE DISSEMINATION AND COMMUNICATION

PART 7. EXPERIMENTAL PART AND DEVELOPMENT OF A RESEARCH PLAN

MODULE 14. EXPERIMENTAL CULINARY AND SENSORIAL PRACTICES (6 ECTS)

1. GROUP 1. CULINARY BASIC LEVEL. NON PROFESSIONAL.
 - A. TRADITIONAL TYPES OF MEALS. DESIGNING MENU BASED ON CLASSIC MEDITERRANEAN DIET RECIPES
 - B. PREVISION. TEMPOS MANAGEMENT. WORK PLAN.
 - C. RECIPES DEVELOPMENT AWARENESS. PROCESSES CONTROL
 - D. ORGANOLEPTIC CLINIC. TASTE PHYSIOLOGY. WINE PARING.
 - E. COOKING AND SENSORIAL PRACTICES
2. GROUP 2. CULINARY ADVANCED LEVEL. PROFESSIONAL EXPERIENCE OR WITH COOKING SKILLS.
 - A. GASTRONOMIC MENU COMPOSITION BASED ON MEDITERRANEAN DIET MODEL.
 - B. BASES DEVELOPMENT. MISE EN PLACE. CONTEMPORARY TECHNICS.
 - C. REAL TIME MENU EXECUTION
 - D. WINE PAIRING
 - E. ORGANOLEPTIC CLINIC. TASTE PHYSIOLOGY.

MODULE 15. MASTER'S THESIS_(6 ECTS)

1. SCIENTIFIC LITERATURE
2. DOCUMENTS RELATED TO THE MEDITERRANEAN DIET
3. PROJECT AND BIBLIOGRAPHY SELECTION
4. EXPERIMENTAL OR BIBLIOGRAPHIC PART
5. WRITING OF THE THESIS
6. PREPARATION OF THE DEFENSE
7. DEFENSE OF THE THESIS