

SEMESTER AT SEA COURSE SYLLABUS

Colorado State University, Academic Partner

Voyage:	Spring 2023
Discipline:	Food Science and Human Nutrition
Course Number and Title:	FSHN 150 Survey of Human Nutrition (Section 1)
Division:	Lower
Faculty Name:	Melissa Wdowik
Semester Credit Hours:	3

Prerequisites: None

COURSE DESCRIPTION

Survey of Human Nutrition provides insight into nutrition concepts and principles along with their application to personal and population health. We will establish a foundation by examining digestion, absorption, metabolism and functions of nutrients. Students will understand the scientific basis for nutrition, physical activity, and health guidelines, and compare and contrast recommendations among countries we visit on the voyage. We will consider a continuum of nutritional status of populations and learn about the “dual burden” of malnutrition where both under- and over-nutrition coexist as public health problems. In addition, we will examine the prevention and treatment of nutrition-related chronic diseases, including heart disease, diabetes, and cancer. Students will investigate the complexity of global issues related to nutrition and health.

Throughout the voyage, discussions will revolve around the social-ecological model – how multiple layers of influence (such as cultural practices, social systems, and environment) interact to shape a person’s food and physical activity choices. In country, students will observe and experience food practices and systems. Post-port, students will cultivate self-awareness through analysis and reflection – comparing and contrasting food, nutrition, and health patterns and cultural traditions. Furthermore, critical thinking skills will be enhanced with a personal diet evaluation project with a global perspective.

LEARNING OBJECTIVES

Upon completion of this course, students will be able to:

- Describe basic nutrition concepts and functions of essential nutrients, and apply this understanding to health outcomes.
- Discuss macronutrient and micronutrient requirements and food sources across nations.
- Compare and contrast the scientific basis for major world health recommendations and guidelines, including WHO, FAO, USDA, the Mediterranean Diet and National Food Guides of the countries we visit.

- Identify factors that influence health and wellness including personal preferences, social norms, culture, physical environments, psychological factors, religion, family, and traditions, especially through the lens of a multicultural perspective.
- Recognize the scientific evidence linking genetic, geographic, dietary, and physical activity characteristics to chronic diseases (heart disease, diabetes, cancer, obesity).
- Evaluate nutritional intake unique to dietary patterns of the cultures we visit, such as plant-based and seafood-based diets.
- Apply qualitative and quantitative assessment approaches to evaluate their own dietary intake and make suggestions to modify their diet to improve health.
- Understand Farm-to-Table concepts and practices in various countries, including the ports visited on this voyage, and critique those observed during our Field Class.
- Identify and apply concepts of human nutrition in each of the countries on this voyage, especially with regard to foods' origin and nutrient content.

OPTIONAL TEXTBOOK

AUTHORS: Smith A, Collene A, and Spees C
 TITLE: Wardlaw's Contemporary Nutrition
 PUBLISHER: McGraw Hill
 ISBN (print): 9781260695489
 ISBN (e-book): 9781260790061
 DATE/EDITION: 2022/12th Edition

TOPICAL OUTLINE OF COURSE

Embarkation Day – January 5

1: Introduction and Overview

Course norms and expectations

Overview of the Social-Ecological Model: cultural, social, and environmental impacts on food choices

Discussion: Personal culture-related food experiences and influences

Activity: Intro to self-assessment and Dietary Analysis Project

2: Nutrition, Food Choices and Health

Discussion: Influences on food choices in India and other countries of South Asia

Activity: Investigating Superfoods - Healthy or Hype?

Reading: [Ch 1 and slides](#)

3: Designing A Healthy Eating Pattern

Discussion: How do you use dietary guidelines?

Activity: Dietary Guidelines and Recommendations of India and other countries of South Asia

Reading: [Ch 2 and slides](#)

4: The Human Body: A Nutrition Perspective

Discussion: The digestive journey of your favorite meal

Activity: Digestion - The Microbiome

Reading: [Ch 3 and slides](#)

Assignment: *Diet Analysis Project due*

5: Carbohydrates

Discussion: Dietary carbohydrate intake in your home country compared to Kenya

Activity: Comparing High Carb and Low Carb Diets

Reading: [Ch 4 and slides](#)

6: Health Issues: Diabetes

Discussion: What dietary and lifestyle factors influence diabetes?

Discussion: Why are diabetes rates rising in Kenya?

Reading: [Slides](#)

Optional Reading: [WHO fact sheet \(Diabetes Prevalence and Contributing Factors Around the World\)](#)

7: Fats and Lipids

Discussion 1: Why we need fats in our diet and in our body

Activity: Dietary fats in Jordan and other countries of the Middle East

Reading: [Ch 5 and slides](#)

Optional Reading: [Eat Smart - Fats](#)

8: Proteins

Discussion: Dietary protein intake in the Middle East

Activity: Rate Your Plate for Protein

Reading: [Ch 6 and slides](#)

9: Vegetarianism

Activity: Vegetarian Choices in Jordan and other countries of the Middle East

Reading: [Eating A More Plant-Based Diet](#)

10: Traditional, Complementary, and Alternative Medicine

Discussion: Spiritual healing, herbal medicine, and dietary practices

Reading: [TAIM - Traditional Arabic & Islamic Medicine](#)

11: EXAM 1 (Midterm)

Covers readings, discussions, and material from classes 1-10

12: Mediterranean Eating and Lifestyle Patterns

Activity: Compare the Mediterranean, DASH, and Healthy American Plate

Discussion: Cyprus's Nutrition and Lifestyle Profile

Reading: [What Is The Mediterranean Diet?](#)

13: Energy Balance

Discussion: Are calories worth counting?

Activity and Discussion: Comparing dietary patterns and chronic diseases around the world

Reading: [Ch 7 and slides](#)

14: Vitamins and Phytochemicals

Discussion: Food sources of vitamins and phytochemicals in Mediterranean countries

Reading: [Ch 8 and slides](#)

15: Antioxidants and Inflammation

Activity: Finding antioxidants in nature

Discussion: Comparing osteoporosis, cancer, and cardiovascular disease across nations

16: The Blue Zones

Discussion: Why do people in Blue Zone regions of the world live longer, healthier lives?

17: The Double Burden of Malnutrition: Overweight and Undernourished

Activity and Discussion: The double burden of malnutrition around the world

Reading: [Stuffed and Starved](#)

18: The Triple Burden of Malnutrition in Children

Activity and Discussion: Overweight, undernourished and micronutrient deficiencies in youth

Reading: [Fighting Hunger in Croatia by Addressing Poverty](#)

19: Water

Activity: Rate Your Beverage Intake

Discussion: How are beverage choices influenced by culture, geography, and advertising?

Reading: [Ch 9 \(part 1\) and slides](#)

20: Minerals

Activity: What major and trace minerals are in your diet now vs. at home?

Discussion: Comparing vitamin and mineral content of the diets in countries on our voyage

Reading: [Ch 9 \(part 2\) and slides](#)

21: Nutrition for Fitness and Sports

Discussion: How is the microbiome impacted by exercise and physical activity?

Activity: Create a meal plan for fitness and sports

Reading: [Ch 10 and slides](#)

22: Food, Faith and Religion

Discussion: How do religious beliefs and values influence food choices?

Reading: [Food, Faith and Religion](#)

23: Exam 2 (Final)

Covers readings, discussions and material from classes 12-22

24: Student Comparative Experiential Project (CEP) presentations

25: Student Comparative Experiential Project (CEP) presentations

Disembarkation Day – April 20

FIELD WORK

Semester at Sea® field experiences allow for an unparalleled opportunity to compare, contrast, and synthesize the different cultures and countries encountered over the course of the voyage. In addition to the one field class, students will complete a Comparative Experiential Project that span multiple countries.

Field Class & Assignment

STUDENTS: Field Class proposals listed below are not finalized. Confirmed ports, dates, and times will be posted to the [Spring 23 Courses and Field Class page](#) when available.

Field Class attendance is mandatory for all students enrolled in this course. Do not book individual travel plans or a Semester at Sea sponsored trip on the day of your field class.

Field Classes constitute 20% of the contact hours for each course.

Field Class Title: Experiencing Food Culture in a New Country

Outcomes:

- Experience the food culture of the country by visiting a local food market, restaurant, school and/or food kitchen
- Discover aspects of cultural heritage and national identity reflected in food choices and habits
- Gain perspective into regional cooking and eating styles by experiencing hands-on food preparation
- Identify nutrition and health beliefs by exploring traditional foods and food practices

Activities:

- Visit a farmers' market or grocery stores to purchase foods for lunch or snack
- Eat in a local restaurant with a guide to explain foods along with the traditions, culture, and national identity of these foods
- Engage with a local chef, restaurant manager or food producer to discuss how food is prepared, procured, or produced
- Participate in a cooking class with traditional ingredients, recipes, and cooking styles
- Add some kind of physical activity to address the health aspect of this course (human nutrition being a complement to physical activity and an active lifestyle)

Assessment:

Students will be expected to prepare for the field class by reading and discussing class assignments ahead of time. They will then be evaluated on two outcomes. First, they must participate and engage appropriately with local guides. Second, they will write an essay (2-3 pages) about how food, food customs and food culture can provide insight into individual identity, health, and society. They will be given the following ideas for reflection:

- What food customs reflect tradition, history, culture, religious beliefs, or heritage?
- How do local food habits reflect the geography and ecosystems of the region?
- Discuss cooking and eating styles. Compare and contrast them to those of your own country and culture.
- Discuss leading health and nutrition topics of the country (for example, childhood malnutrition or high diabetes rates) and how they are related to food availability and eating habits.

Depending on the country and field class scheduled, students will be referred to specific course materials (readings, slides or discussions) to guide their reflection. The assignment will be due one week after the field class.

Comparative Experiential Project

The CEP is the required comparative assignment that span multiple countries. The Comparative Experiential Project constitutes at least 5% of the grade for each course.

♦ Part 1: Ongoing Experiential Project

This assignment is your opportunity to process experiences of ports as you go. In five of the port countries we visit (other than the port of the Field Class), you will independently observe what locals are eating and what is available for you to eat.

You are encouraged to talk to hosts, guides, and/or local vendors if culturally acceptable as well as take pictures if appropriate and permission is asked.

Questions to guide your reflection

- What foods and beverages were available in local markets? (These could be fresh air markets, farm stands, street vendors or grocery stores. Do not include restaurants).
- How did available foods (in terms of variety, abundance, fresh vs. cooked, and nutrition) compare to market and street foods you find at home?
- What was your impression of portions and serving sizes compared to what people eat at home?
- How did culture, religion, economic factors, or geography influence what was available?
- Were foods in these markets locally sourced or imported?

Mini presentation and due date

- The beginning of each class after a port will be dedicated to student reflection of their experiences in port related to this project. You should be prepared to discuss the questions above. You will do this five times.

Mini paper and due date

- You will also turn in a 1-page paper of the same content as above. This is due one week after visiting the port. Please submit electronically.
- 50 points / 10% of course grade

♦ *Part 2: Cumulative Experiential Project*

Toward the end of the voyage, you will compare food and nutrition in the five countries you reflected on above. This is where you get to compare and contrast observations across countries and cultures.

Questions to guide your reflection

- Use the questions above to discuss differences and similarities between ports.

Cumulative presentation and due date

- Students will present their findings and turn in a 2-3 page paper during the final two classes of the voyage. Please submit electronically.
- See syllabus for dates.
- 50 points / 10% of course grade

METHODS OF EVALUATION

20%	Field Class & Field Class Assignment	(100 points)
20%	Comparative Experiential Project	(100 points)
20%	Class Activities and Discussions	(100 points)
10%	Dietary Analysis	(50 points)
15%	Midterm Exam	(75 points)
15%	Final Exam	(75 points)
100%		500 points

GRADING SCALE

The following Grading Scale is utilized for student evaluation. Pass/Fail is not an option for Semester at Sea® coursework. Note that C-, D+ and D- grades are also not assigned on Semester at Sea® in accordance with the grading system at Colorado State University (the academic partner institution).

Pluses and minuses are awarded as follows on a 100% scale:

<u>Excellent</u>	<u>Good</u>	<u>Satisfactory/Poor</u>	<u>Failing</u>
97-100%: A+	87-89%: B+	77-79%: C+	Less than 60%: F
93-96%: A	83-86%: B	70-76%: C	
90-92%: A-	80-82%: B-	60-69%: D	

ATTENDANCE/ENGAGEMENT IN THE ACADEMIC PROGRAM

Attendance in all Semester at Sea® classes, including the Field Class, is mandatory. Students must inform their instructors prior to any unanticipated absence and take the initiative to make up missed work in a timely fashion. Instructors must make reasonable efforts to enable students to make up work which must be accomplished under the instructor's supervision (e.g., examinations, laboratories). In the event of a conflict in regard to this policy, individuals may appeal using established CSU procedures.

CLASSROOM CLIMATE

Semester at Sea® is committed to the Voyage Community Values. Consequently, the classroom environment is founded on mutual respect, community, and an aim toward equity. The Voyage Community Values support the creation of a collaborative and vibrant community. Our community is the foundation of our learning, critical inquiry, and discovery. Each member of this course has a responsibility to uphold these values when engaging with one another.

With that, please review the following Voyage Community Values:

- **Well-Being:** We commit to the health, safety and well-being of ourselves, all members of our voyage community, *and* members of the communities we will visit.
- **Interconnectedness:** We understand our actions and attitudes have an impact locally and globally. We always seek to positively affect the planet and the people around us near and far.
- **Respect:** We honor the inherent dignity of *all people* with an abiding commitment to freedom of expression, scholarly discourse and the advancement of knowledge. We have the right to be treated, and the responsibility to treat others, with fairness and equity.
- **Inclusion:** We ensure inclusive environments that welcome, value, affirm and embrace *all people* within the shipboard community and in each country we visit.
- **Integrity:** We are honest and ethical in all of our interactions, including our academic work. We hold ourselves accountable for our actions.
- **Excellence:** We model the highest academic standards of preparation, inquiry and knowledge and consistently seek to understand complex issues and express informed opinions with courage and conviction.

LEARNING ACCOMMODATIONS

Semester at Sea® provides academic accommodations for students with diagnosed learning disabilities, in accordance with ADA guidelines. Students who will need accommodations in a

class, should contact ISE to discuss their individual needs. Any accommodation must be discussed in a timely manner prior to implementation.

A letter from students' home institutions verifying the accommodations received on their home campuses (dated within the last three years) is required before any accommodation is provided on the ship. Students must submit verification of accommodations to their Student Services advisor as soon as possible, but no later than two months prior to the voyage. More details can be found within the **Course Registration Packet**, posted to the student portal prior to registration.

STUDENT CONDUCT CODE

The foundation of a university is truth and knowledge, each of which relies in a fundamental manner upon academic integrity and is diminished significantly by academic misconduct. Academic integrity is conceptualized as doing and taking credit for one's own work. A pervasive attitude promoting academic integrity enhances the sense of community and adds value to the educational process. All within the University are affected by the cooperative commitment to academic integrity. All Semester at Sea® courses adhere to this Academic Integrity Policy and Student Conduct Code.

Depending on the nature of the assignment or exam, the faculty member may require a written declaration of the following honor pledge: "I have not given, received, or used any unauthorized assistance on this exam/assignment."

RESERVE BOOKS FOR THE LIBRARY

AUTHOR: Ken Alba, editor
TITLE: Food Cultures of the World Encyclopedia
PUBLISHER: Greenwood
ISBN: 978-0-313-37626-9
DATE/EDITION: 2011

FILMS

TITLE OF FILM: A World of Food: Tastes and Taboos in Different Cultures
DISTRIBUTOR: Berkeley Media LLC

TITLE OF FILM: Planet Food: Spice Trails Special by Pilot Productions
DISTRIBUTER: Pilot Productions (MMX Pilot Film & Television Productions Ltd.)

ELECTRONIC COURSE MATERIALS

None