

SEMESTER AT SEA COURSE SYLLABUS

Colorado State University, Academic Partner

Voyage:	Spring 2020
Discipline:	Food Science and Human Nutrition
Course Number and Title:	FSHN 150 Survey of Human Nutrition (Section 1)
Division:	Lower
Faculty Name:	Colleen Burke
Semester Credit Hours:	3

Prerequisites: None

COURSE DESCRIPTION

This course will explore basic nutrition concepts and principles and their application to personal and population health. We will establish a foundation by studying the 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 on which populations lie, 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.

LEARNING OBJECTIVES

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

1. Explain the scientific basis for major US health recommendations and guidelines (such as the Dietary Reference Intakes, Dietary Guidelines for Americans, Healthy Eating Plate, New American Plate, and Physical Activity Guidelines for Americans), and compare and contrast recommendations to global health recommendations and guidelines (such as WHO and FAO) among countries visited on the voyage.

2. Identify and evaluate factors that influence health and wellness including personal preferences, social norms, physical environments, psychological factors, religion, family, and traditions, especially through the lens of a multicultural perspective.
3. Discuss the scientific evidence linking dietary and physical activity practices and chronic diseases (cardiovascular, cancer, osteoporosis, diabetes, obesity).
4. Evaluate nutritional recommendations for unique populations (such as for athletes) and dietary patterns (such as vegetarian and Ayurveda diets).
5. Describe the functions of essential nutrients (protein, fat, carbohydrate, vitamins, minerals, and water), and compare sources of these nutrients from traditional foods among countries visited on the Semester at Sea voyage.
6. Explain acquisition of essential nutrients from farm to ingestion, digestion, absorption, and metabolism.
7. Apply qualitative and quantitative assessment approaches to evaluate dietary intake and sociological factors which influence dietary intake and make suggestions to modify their diet to improve health.

REQUIRED TEXTBOOKS

AUTHOR: Smith A, Collene A, and Spees C
TITLE: Wardlaw's Contemporary Nutrition
PUBLISHER: McGraw Hill
ISBN #:978-1-259-70996-8
DATE/EDITION: 2019/11th edition

TOPICAL OUTLINE OF COURSE

Depart Ensenada, Mexico – January 4

- A1—January 6:** Introduction and Overview
Nutrition, Food Choices, and Health
In Class Exercises: What influences your food choices? Self-Evaluation of food habits
Discussion of personal culture-related food experiences
[Reading: Chapter 1](#)
- A2—January 8:** Designing a Healthy Eating Pattern
In Class Exercises: How to use the Nutrition Facts label, Rate Your Plate
[Reading: Chapter 2](#)
- A3—January 10:** The Human Body: A Nutrition Perspective Part 1
In Class exercise: Lunch – where is it in my body now?
Overview of Hawaiian Diet, Cultural Food and Nutrition Habits, and Food Systems
[Reading: Chapter 3](#)
Due: Dietary Analysis Project

Honolulu, Hawaii, USA – January 12

Reflection & Study Day – January 13 (No Class)

A4—January 14: Discussion of port experiences related to food, nutrition, and health
The Human Body: A Nutrition Perspective Part 2
In Class Exercise: Superfoods - Science or Hype?

International Date Line Crossing – January 16 (Lost Day)

A5—January 17: Carbohydrates – An Important Fuel Source
In Class Exercise: Sugar – a bittersweet reputation
[Reading: Chapter 4](#)

Study Day – January 19 (No Class)

A6—January 20: Lipids – Forms, Functions, and Food Sources
In Class Exercise: Fat Myths - Busted
[Reading: Chapter 5](#)

A7—January 22: Proteins – Structure, Function, and Needs
Overview of Japanese Diet, Cultural Food and Nutrition Habits, and Food Systems
[Reading: Chapter 6](#)

Kobe, Japan – January 24-28

In Port – Gather information for your Independent Field Assignment. Take photos or video of some of your meals that you experience in Japan and write a brief description of the cuisine you experienced. Talk to locals that you meet about traditional Japanese foods, cultural food habits, and nutrition and health challenges and opportunities (refer to Independent Field Assignments section of syllabus for specific assignment details and requirements).

A8—January 29: Discussion of port experiences related to food, nutrition and health
Traditional Health Beliefs and Practices
Overview of Chinese Diet, Cultural Food and Nutrition Habits, and Food Systems
Traditional Chinese Medicine
Due: Food and Culture Journey Independent Field Assignment 1

Shanghai, China – January 31 – February 5

In Port – Gather information for your Independent Field Assignment. Take photos or video of some of your meals that you experience in China and write a brief description of the cuisine you experienced. Talk to locals that you meet about traditional Chinese foods, cultural food habits, and nutrition and health challenges and opportunities (refer to Independent Field Assignments section of syllabus for specific assignment details and requirements).

A9—February 6: Discussion of port experiences related to food, nutrition and health
Vegetarian and Plant-Based Dietary Patterns
Food and Faith - Diet Comparisons: Buddhists, Hindus, and Muslims
Due: Food and Culture Journey Independent Field Assignment 2

A10—February 8: Food and Faith (continued)
Overview of Vietnamese Diet, Cultural Food and Nutrition Habits, and
Food Systems
[Reading: Food and Culture Chapter 3](#)

Ho Chi Minh City – February 10-15

A11—February 16: Discussion of port experiences related to food, nutrition and health
Overview of Malaysian Diet, Cultural Food and Nutrition Habits, and
Food Systems
Energy Balance, Under- and Over-Nutrition
[Reading: Chapter 7](#)

Community Programming – February 17 (No Class)

Port Klang/Kuala Lumpur, Malaysia – February 19-24

A12—February 25: Discussion of port experiences related to food, nutrition and health
Energy Balance, Under- and Over-Nutrition (continued)

A13—February 27: **Exam 1** (covers material, readings and discussions from classes A1-
A12)
Overview of Indian Diet, Cultural Food and Nutrition Habits, and
Food Systems
Ayurveda: India's 5000 Year Old diet and Wellness Plan

Cochin, India – February 29 – March 5

In Port – Gather information for your Independent Field Assignment. Take photos or video of some of your meals that you experience in India and write a brief description of the cuisine you experienced. Talk to locals that you meet about traditional Indian foods, cultural food habits, and nutrition and health challenges and opportunities (refer to Independent Field Assignments section of syllabus for specific assignment details and requirements).

A14—March 6: Discussion of port experiences related to food, nutrition and health
Global Nutrition: Undernutrition in Vulnerable Groups - Pregnant and
Breastfeeding Women, Children
[Reading: Chapters 12 & 13](#)
Due: Food and Culture Journey Independent Field Assignment 3

Community Programming – March 7 (No Class)

A15—March 9: Vitamins: Sources and Functions
[Reading: Chapter 8](#)

Port Louis, Mauritius — March 11

Field Class Section 2

A16—March 12: Discussion of port experiences related to food, nutrition and health
Minerals – Sources and Functions
[Reading: Chapter 9](#)

A17—March 14: The Importance of Water
How much water do you drink?
[Reading: Chapter 9 pages 349-357](#)

A18—March 16: Nutrient Needs in Fitness and Sport
[Reading: Chapter 10](#)

Cape Town, South Africa — March 18-23

In Port – Gather information for your Independent Field Assignment. Take photos or video of some of your meals that you experience in South Africa and write a brief description of the cuisine you experienced. Talk to locals that you meet about traditional South African foods, cultural food habits, and nutrition and health challenges and opportunities (refer to Independent Field Assignments section of syllabus for specific assignment details and requirements).

A19—March 24: Discussion of port experiences related to food, nutrition and health
Nutrition and Chronic Disease
Inflammation – the root cause of chronic disease throughout the world
Due: Food and Culture Journey Independent Field Assignment 4

Study Day — March 26 (No Class)

A20—March 27: Nutrition and Chronic Disease – Hypertension and Cardiovascular Disease (CVD)
[Readings:](#)

- [Chapter 9 pages 360-366](#)
- [Reading Chapter 5 pages 191-196](#)

A21—March 29: Nutrition and Chronic Disease – Diabetes
[Reading: Chapter 4 pages 150-154](#)

Tema, Ghana — March 30-31

Field Class – March 30th

From Farm to Fork: An exploration of Ghanaian Food Systems and Cuisine

Takoradi, Ghana – April 1-3

A22–April 5: Nutrition and Chronic Disease - Cancer Prevention
[Reading: Chapter 8 pages 335-340](#)
Due: Field Class Assignment

A23–April 7: Food Security and Sustainability
Mindful Eating

A24–April 9: Presentations and Summary of Port Experiences

Casablanca, Morocco – April 11-14

Study Day – April 15 (No Class)

A25–April 16: Discussion of port experiences related to food, nutrition and health
Final Exam (covers material, readings and discussions from classes A13-A24).

Arrive Amsterdam, The Netherlands – 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 independent field assignments that span multiple countries.

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 at least 20% of the contact hours for each course, and are developed and led by the instructor.

Field Class & Assignment (20% of grade)

The Field Class for this course will take place on **March 30th** in **Tema, Ghana**.

Title: From Farm to Fork: An exploration of Ghanaian Food Systems and Cuisine

Description: The Field Class is designed to generate a holistic, integrative view of the regional food system by engaging with different stakeholders and understanding the links among them. We will visit and tour traditional food markets in Tema, then delve into culinary opportunities of local and seasonal foods. We will learn about local agriculture

including challenges and opportunities to support sustainable farming practices and improve health outcomes. Nutrition students from the University of Ghana will join us from “farm to fork” as we explore diverse values and viewpoints about food systems, and factors that affect food choices and consumption patterns.

Learning Objectives:

1. Gain insight into food and cultural eating patterns in Ghana
2. Learn skills necessary to prepare a traditional Ghanaian dish
3. Identify how factors present at different points of the food system influence outcomes in food production, distribution, consumption, and human health
4. Explore diverse values and viewpoints about food systems, and factors that affect food choices and consumption patterns

Evaluation:

After the field class, you will be required to write a report on the field class experience. This report must demonstrate the application of course concepts (from lectures, class discussions, assigned readings, etc.), and highlight your personal observations. Respond to the following prompts and questions:

1. How is the food system defined in this context?
2. Describe two prominent issues in the food system. How are these issues managed?
3. Describe two prominent issues related to nutrition and health. How are these issues addressed locally?
4. Discuss other factors and cultural influences (not mentioned above) that shape food choices and consumption patterns in Ghana?
5. Our senses are our primary source of knowledge about the world. Describe both your food market and culinary experience (one paragraph each) using vivid sensory detail to engage and affect the reader.
6. A conclusion of your findings – what you learned and what you will take away from it.

This report must be typed, double-spaced, and 1-2 paragraphs per prompt. You must include evidence and references to support your views (interviews, class discussions, text book, and other readings). Submit your report electronically.

Grades will be influenced by both the content of the report (insight and knowledge demonstrated, use of supporting evidence when appropriate) and the clarity and effectiveness of the communication (organization, spelling, grammar).

Independent Field Assignments - Food and Culture Journey (25% of grade)

Experiences in port will enhance course material by allowing you to experience local food and food customs. Take photos or video of some of your meals that you experience in port and write a brief description of the cuisine you experienced. Talk to locals that you meet about traditional foods, cultural food habits, and nutrition and health challenges and opportunities.

There will be four ports with independent field assignments, on the theme of “Food and Culture”: Kobe, Shanghai, Cochin, Cape Town. Each assignment is worth 5% of the total

class grade (plus in-class presentations of these assignments worth an additional 5%). These assignments should include 1-2 pages of text (12 pt., double spaced) and can be accompanied with photographs, video, sound recordings, and other records of your visit.

You should pick a food or meal you tasted, a market you visited, a restaurant you ate at, or another food experience that stood out to you during your visit. Write one paragraph reflecting about each of the following (total of four paragraphs):

- Describe the experience
- Explain how this experience connects to cultural food habits
- Discuss how this experience connects to nutrition and/or health
- Discuss how this experience connects to local agriculture

Students will also be expected to present their independent field assignments at least two times in class. These presentations will take place in the class immediately following the port visit. During the port visits, students should take photos, videos, sound recordings, etc. to illustrate their presentations (these can also be included in the written assignments where appropriate). 5% of the total class grade will be assigned to these presentations.

Class Participation and Engagement: You are required to come to class on time and prepared to discuss all assigned materials. Your class participation grade will be based on your participation and engagement in class discussions and activities.

METHODS OF EVALUATION

Field Class	20%
Food and Culture Journey Independent Field Assignments	25%
Dietary and Exercise Analysis Project	15%
Class participation and engagement	10%
Exam 1	15%
Exam 2	15%

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 SAS 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.

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 academic@isevoyages.org as soon as possible, but no later than two months prior to the voyage. More details can be found within the **Course Registration Packet**, as posted to the [Courses and Field Classes page](#) no later than one month 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: Kittler P, Sucher K, Nelms M
TITLE: Food and Culture
PUBLISHER: Cengage
ISBN #:978-1-305-62805-2
DATE/EDITION: 2017/7th edition

AUTHOR: Thich Nhat Hanh
TITLE: How to Eat (part of the Mindfulness Essentials Series)
PUBLISHER: Parallax Press
ISBN #:978-1-937-00672-3
DATE/EDITION: 2014

FILM REQUESTS

TITLE OF FILM: A Place at the Table (2013)
DISTRIBUTOR: Amazon

TITLE OF FILM: Jiro Dreams of Sushi (2011)
DISTRIBUTOR: Amazon

TITLE OF FILM: The Lunchbox (2014)
DISTRIBUTOR: Amazon

Title of Film: The Big Fat Fix Movie
Distributor: Donal O'Neill (\$19.99) www.thebigfatfix.com

ELECTRONIC COURSE MATERIALS

None

ADDITIONAL RESOURCES

None