

**RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
SCHOOL OF ENVIRONMENTAL and BIOLOGICAL SCIENCES**

Department of Food Science



This course satisfies NS (e, f) core learning goals:

- Understand and apply basic principles and concepts in the physical or biological sciences.
- Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis.

COURSE TITLE	Food and Health
COURSE NUMBER	11:400:104:01
CREDITS	3
SEMESTER(S) OFFERED	Spring
CLASS DETAILS	
Days/ Time(s)	Mondays/Thursdays
Location	Loree 22
PREREQUISITE(S)	None
INSTRUCTOR INFORMATION	
Name	Shiu-Ying Ho, PhD
Phone	
Email	syho@sebs.rutgers.edu
Office Hours [Day(s) & Time(s)]	Thursdays 2:15-4:15pm
Office Address	Food Science building Rm 415
COURSE DESCRIPTION	
<p>This course is designed to elucidate the link between nutrition and health by way of food, food components and nutraceuticals. This course will enable students to take a critical look at what they eat and give them a new perspective on how food affects them and their body. Students will gain a basic understanding about the biochemistry of food and learn that food components (i.e. macromolecules) are similar to those that constitute their body. They will learn how malnutrition (under- and over-nutrition and/or simply an unbalanced or inappropriate diet) affects health. The major chronic diseases influenced by diet will be discussed. Finally, students will take a closer look at their</p>	

personal dietary intake and have the chance to learn how to improve their dietary habits, if necessary.

COURSE OBJECTIVES

At the conclusion of this course, students will be able to:

1. Understand and apply basic principles and concepts in the physical or biological sciences
2. Explain and be able to assess the relationship among assumptions, method, evidence, arguments, and theory in scientific analysis.

PROGRAM LEARNING GOAL (S) SATISFIED BY THIS COURSE:

Graduates will effectively communicate Food Science issues

Student Learning Goals and Outcome

The learning assessment will be conducted based on 5 Exams and a Diet Analysis Project. The students' understanding of the biochemistry of food will be assessed through Exam 1, 2 and the Diet Analysis Project. Exam 3, 4, 5 and the Diet Analysis Project will evaluate the students' comprehension of the effects of diet on the major chronic diseases. Overall, the Exams and the Diet Analysis Project will assess the students' comprehensive understanding of nutritional concepts and their ability to address nutritional problems to achieve body health.

The Diet Analysis Project offers the opportunity to evaluate and improve the students' own diet by comparing personal nutrient intake to Dietary Reference Intakes (DRI's) for nutrients, and to dietary guidelines, which set limits for diet components such as saturated fat, cholesterol, and sodium.

All the exams and the Diet Analysis Project are mandatory and necessary to pass this course.

FURTHER INFORMATION ON THE COURSE:

COURSE SCHEDULE/ TOPICS OUTLINE: Spring 2020

Day/Date	Topic	Exam/ Assignment
Th Jan 23	Course Introduction	
M Jan 27	Carbohydrates	
Th Jan 30	Fats	
M Feb 3	Proteins	

Th Feb 6	Water Soluble Vitamins: B's and C	
M Feb 10	Fat Soluble Vitamins: A,D,E,K	
Th Feb 13	Exam 1	Lectures 1-6
M Feb 17	Minerals and water	
Th Feb 20	Energy, Calories and Dietary Guidelines	
M Feb 24	Diet Analysis Instruction	
Th Feb 27	Physiology of digestion	
M Mar 2	Nutrition and Lifecycle I	
Th Mar 5	Nutrition and Lifecycle II	
	Diet Analysis Project Early Submission	
M Mar 9	Microorganisms in food	
Th Mar 12	Exam 2	Lectures 8,9, 11-14
	Diet Analysis Project Regular Submission	
Mar 14-22	Spring Recess	
M Mar 23	Uner and Over-Nutrition	
Th Mar 26	Nutrition and Fitness	
M Mar 30	Diabetes	
Th Apr 2	Nutrition and Cancer	
M Apr 6	Food and Skin Health	Lectures 16-20
Th Apr 9	Exam 3	
M Apr 13	Food and your Heart	
Th Apr 16	Food Allergies	
M Apr 20	Labels	
Th Apr 23	Exam 4	Lectures 22-24
M Apr 27	Nutrient-drug interaction	
Th Apr 30	Nutrigenomics	
M May 4	Movie + take home exam 5	Lectures 26 & 27

STUDENT WELLNESS SERVICES

Just In Case Web App <http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and

stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932- 1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation:

<https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at:

<https://ods.rutgers.edu/students/registration-form>.

Scarlet Listeners

(732) 247-5555 / <http://www.scarletlisteners.com/>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.