

FDSC&TE 2200: THE SCIENCE OF FOOD

SPRING 2019

T&R 11:10-12:30 Hagerty Hall 180

Instructor: Srilatha P. Kolluri, Ph.D.

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Phone: 614.292.7798

Office hours: By appointment (in office 214c Howlett Hall Building)

Prerequisite: Biology 1101 or 1113

Course Learning Outcomes

Students completing the course should be able to:

1. Understand and appreciate the significance of becoming more effective consumers of nutrition news.
2. Appreciate and value the content of this course in terms of relevancy and potential impact on their daily lives.
3. Value the impact of food science & technology in addressing particular disease states.
4. Understand the potential of science to address problems of the contemporary world.
5. Understand how advances in biology affect the food supply.

This course satisfies a GEC science requirement as an additional science course. The College of Arts & Sciences has specified a set of educational goals and learning objectives. Courses in natural and biological sciences foster an understanding of the principles, theories, and methods of modern science, the relationship between science and technology, the implications of scientific discoveries and the potential of science and technology to address problems of the contemporary world. As such, the course has the following GEC learning objectives.

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students understand key events in the development of science and recognize that science is an evolving body of knowledge.
3. Students describe the inter-dependence of scientific and technological developments.
4. Students recognize social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

Course Material

This course does not have a required text. The lecture slides will be posted on Carmen in PDF format. You can find them under the appropriate module for the week. This requires printing for easy note taking. In addition, course readings in the appropriate module will serve as text/study guide. You will find latest food safety news in the page called **Food Safety News** under the resource module. At times during the semester, you may be asked to read a specific article and be prepared to discuss it during class.

Examinations and Policies

There will be three exams, each worth 100 points.

All exams are approximately 50 min. and held in the regular classroom

1st exam	Feb. 07	11:10 AM-12:00 PM
2nd exam	Mar. 07	11:10 AM-12:00 PM
3rd Exam	Apr. 29	12:00 -12:50 PM

All exams are 50 multiple choice questions each worth 2 points. There is no cumulative exam and each exam covers material in individual segments. The exams administered as secure exams which means that you will turn in the question paper along with your scantron at the end of the exam. Please look at the course calendar to familiarize yourself with the topics covered on each exam. Exams are closed book and notes are not permitted during an exam. No electronics of any kind, including apple watches, are permitted to be out within view at any time during an exam. You may not wear any type of watch to an exam. No verbal or written communication with other students is permitted during an exam.

Quizzes (online)

There will be 12 content quizzes, each worth 5 points, 1 Syllabus & FAQ quiz worth 10 points and a GEC survey/evaluation worth 10 points.

Assignments

There are four assignments. The Food Chart is worth 50 points. The supermarket survey (SMS) is worth 30 points and each critique is worth 25 points. There may be an extra credit assignment assigned near the end of the semester.

1. All graded work in this course, which includes assignments, quizzes, participation questions, and exams must be completed solely by the student and be their own, original work. Tutor assistance or assistance by others (including verbal and written communication) is not permitted to complete assignments, quizzes and exams. However, you may refer to your notes and course materials while taking the online quizzes. No outside assistance in the form of electronics (including the Apple watch), notes, or verbal or written communication with others is permitted during an exam. You may work in student groups on the supermarket survey. Please refer to the specific instructions for that assignment.
2. The Food Chart assignment requires you to document your food intake over 4 days, conduct a nutrient analysis, and reflect on it. If you are under the supervision of a medical provider for a reason that makes undertaking this project inappropriate, contact the instructor as soon as possible for an alternative.
3. Students are responsible for taking exams at the scheduled times. Please pay attention to the Registrar's academic calendar. Exams may not be taken after the scheduled date without a valid,

documentable (written) excuse. If you are ill on the day of an exam, you must have a documentable doctor's excuse for the date and time of the exam indicating that missing the exam was unavoidable.

4. If you have an unavoidable, documentable conflict, it may be possible to accommodate the conflict, but arrangements must be made well in advance. I cannot accommodate a make-up exam (including a make-up last exam) for students who contact me after the scheduled exam, unless you have valid documentation (written proof) of why you could not attend the exam and that it was unavoidable. Makeup examinations **must** be scheduled at a definite time and completed within one week of the regularly scheduled exam. If you miss the scheduled time for a makeup exam without a valid, documentable reason, a score of 0 will be recorded.
5. If the third exam is missed for a valid, documentable reason, communication and arrangements must be made prior to submission of grades, which is typically the day following the exam. Otherwise a score of zero will be recorded. You may expect an in-class announcement of the date grades will be officially submitted.
6. You will see a column for extra credit and a curve on Carmen in the grade book. I may or may not offer extra credit or apply a curve. This is dependent on the class as a whole in a particular semester. These will be used at my discretion and should not be considered automatic just because it is part of the Carmen course website.

Grading Scale

This course follows the OSU standard percent grading scale

A	93-100		C+	77-79.9
A-	90-92.9		C	73-76.9
B+	87-89.9		C-	70-72.9
B	83-86.9		D+	67-69.9
B-	80-82.9		D	60-66.9
		E	Below 60

Quiz Instructions and Suggested Quiz Schedule

There are 13 multiple-choice quizzes which you will take on Carmen and one survey quiz. The first quiz (Syllabus FAQ) is worth 10 points and must be completed the first week of classes as it pertains to the

material presented in the syllabus and the course website. It has 10 questions each worth 1 point. You will have one attempt for this quiz.

There are 12 course content quizzes, each with 5 questions worth 1 point. Quizzes 2 through 5 must be taken **prior to exam 1 (11:00 AM, Feb. 07)**. Quizzes 6 through 9 must be taken **prior to exam 2 (11:00 AM, Mar. 07)** and Quizzes 10 through 13 must be taken **prior to the third exam (12PM Apr. 29)**. It is expected that the quizzes will serve as a review and study mechanism and will help you prepare for the exams. The quizzes will **NOT** be available on Carmen past the dates listed above. When you finish the quiz it will be instantly graded and the correct answers displayed. With each content quiz attempt, you will be presented with 5 random questions. You may take each content quiz up to 3 times. The highest score of the three attempts will be the one that is recorded as your grade.

The last quiz grade is a GEC survey/evaluation that you will complete online worth 10 points. It is an opportunity to provide feedback concerning your experience in this class. It is anonymous and you automatically receive 10 points upon completion of the evaluation.

Suggested Quiz Schedule. We suggest you take the associated quiz when we finish the topic in lecture.

Quiz	Topics
Quiz 1	Syllabus
Quiz 2	Why do we eat, RDA, Digestion
Quiz 3	Carbohydrates, Proteins
Quiz 4	Lipids and Fat soluble vitamins
Quiz 5	Water soluble vitamins
EXAM 1	Topics covered in quizzes 2-5
Quiz 6	Minerals, Labeling, Supplements, Organic and natural foods
Quiz 7	Weight loss, Eating Disorders,
Quiz 8	Food Allergies, Phytochemicals
Quiz 9	Microbiology and safe food handling
EXAM 2	Topics covered in quizzes 6-9
Quiz 10	Biotechnology, Diet and Cancer
Quiz 11	Food industry and Unit operations,
Quiz 12	Food processing and preservation, Food additive testing
Quiz 13	Wine and Beer, Chocolate
EXAM 3	Topics covered in quizzes 10-13
GEC Evaluation survey	Optional

LECTURE CALENDAR

Bold indicates an assignment due or an exam (these do not change). This lecture schedule is tentative and subject to change. Check the suggested quiz schedule page for due dates of quizzes

<u>Lecture</u>	<u>Date</u>	<u>Topic</u>
1	Jan. 08	Course introduction, assignment expectations, Why do we eat?
2	Jan. 10	RDA. Taste & aroma activity
3	Jan. 15	Digestion. Critique 1 guidelines Super taster strips
4	Jan. 17	Carbohydrates. Food Photo Journal due
5	Jan. 22	Proteins. Sample alternate protein sources. Food chart demo.
6	Jan. 24	Lipids
7	Jan. 29	Fat soluble vitamins. Critique 1 due
8	Jan. 31	Water soluble vitamins
9	Feb. 05	Finish up Exam 1 material. Review for Exam 1
10	Feb. 07	Exam 1
11	Feb. 12	Minerals. Discuss Critique 1
12	Feb. 14	Labeling. Supplements. Organic and natural foods
13	Feb. 19	Weight loss. Eating disorders. Food chart demo
14	Feb. 21	Food allergies. Phytochemicals. Food chart due
15	Feb. 26	Food microbiology

16.	Feb. 28	Food microbiology and safe food handling
17	Mar. 05	Finish up material for Exam 2. Review for exam 2
18	Mar. 07	Exam 2
19	Mar. 12	Spring break
20	Mar. 14	Spring break
21	Mar. 19	Discuss Food Chart. Biotechnology
22	Mar. 21	Biotechnology
23	Mar. 26	Diet and Cancer. Supermarket survey due.
24	Mar. 28	Guest Lecture – Wine/Beer
25	Apr. 02	Diet and Cancer Discuss supermarket survey. Food processing.
26	Apr. 04	Food Industry and Unit operations
27	Apr. 09	Food processing & Preservation. Critique 2 due
27	Apr. 11	Food processing & Preservation
28	Apr. 16	Food additive testing. Discuss Critique 2
29	Apr. 18	Chocolate
30	Apr. 23	Review for Exam 3
31	Apr. 29	Exam 3 12:00 PM-12:50 PM regular classroom

Academic Misconduct

Additional information can be found at the Office of Academic Affairs (<http://oaa.osu.edu/coam.html> [Links to an external site]). Academic Rights and Responsibilities at: <http://studentaffairs.osu.edu>.

Committee on Academic Misconduct statement. Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's Code of Student Conduct, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's Code of Student Conduct and this syllabus may constitute "Academic Misconduct." The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's Code of Student Conduct is never considered an "excuse" for academic misconduct, so we recommend that you review the Code of Student Conduct and, specifically the sections dealing with academic misconduct. If we suspect that a student has committed academic misconduct in this course, we are obligated by University Rules to report our suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact us.

Requesting Accommodations

Any student who feels s/he may need an accommodation based on the impact of a disability should contact one of the instructors privately to discuss your specific needs. Please contact the Office for Disability Services at 614-292-3307 in 098 Baker Hall to coordinate reasonable accommodations for students with documented disabilities. Additional information can be found at <http://ods.osu.edu/>.