

**FS 110**                      **INTRODUCTION TO FOOD SCIENCE**                      **FALL 2014**

TITLE OF COURSE:      FS 110 INTRODUCTION TO FOOD SCIENCE  
CREDIT HOURS:        3 HOURS

INSTRUCTOR:      DR. DOJIN RYU                                      PHONE:      (208) 885-0166  
OFFICE:            AG SCI 116 (UI)                                      E-MAIL:      dryu@uidaho.edu  
OFFICE HOURS:    TUESDAYS & WEDNESDAYS: 9-11 AM, 2 -3 PM, OR BY APPOINTMENT

COURSE DESCRIPTION:    Introduction of chemical and physical properties of food; major processing and preservation principles; application of science and technology to various food products; and discussion of current issues related to food and health.

PREREQUISITES:      None.

COURSE REQUIREMENTS:    Each student will be required to do the following:

- Demonstrate knowledge of the material covered in class through tests throughout the semester.
- Complete assignments by the due dates.
- Read the textbook and other suggested books and articles to complement and broaden knowledge of the subject acquired during lectures.

STUDENT LEARNING OUTCOMES (SLOs):      Successful completion of the course should enable the student to:

- (a) Learn and integrate - *Through independent learning and collaborative study*, attain, use, and develop scientific knowledge and the ability to integrate information across disciplines.
- (b) Think and create - Use multiple thinking strategies to examine real-world issues, explore creative avenues of expression, solve problems, and make consequential decisions.
- (c) Communicate - Acquire, articulate, create and convey intended meaning using verbal and non-verbal methods of communication that demonstrate respect and understanding in a complex society.
- (d) Clarify purpose and perspective - Explore one's life purpose and meaning through transformational experiences that foster an understanding of self, relationships, and diverse global perspectives.
- (e) Practice citizenship - Apply principles of ethical leadership, collaborative engagement, socially responsible behavior, respect for diversity in an interdependent world, and a service-oriented commitment to advance and sustain local and global communities.

REQUIRED TEXTBOOK

None.

RECOMMENDED BOOKS FOR READING:

Ward, J.D. Principles of Food Science, 3<sup>rd</sup> edition, The Goodheart-Willcox Company, Inc. 2013.  
ISBN 978-1-60525-609-2.

Campbell-Platt, G. (Ed). Food Science and Technology, Wiley-Blackwell. 2009.

Murano, P. S. Understanding Food Science and Technology, Wadsworth/Thompson Learning,  
Belmont, CA, 2003.

Vaclavik, V. and Christian, C., Essentials of Food Science, 3rd Ed., Kluwer Academic/Plenum  
Publishers, New York, NY, 2007.

<u>EVALUATION:</u>	Two Exams (100 points each)	200 points	40%
	Comprehensive Final Exam	150 points	30%
	Group Project	100 points	20%
	<i>Final paper (60 pts) + Presentation (30 pts) + Peer evaluation (10 pts)</i>		
	<u>Quizzes</u>	<u>50 points</u>	<u>10%</u>
	<b>TOTAL</b>	<b>500 points</b>	<b>100%</b>

<b>Grades:</b>	<b><u>Total Points</u></b>	<b><u>Percentile</u></b>	<b><u>Final Grade</u></b>
	<b>451 – 500</b>	90% <	A
	<b>401 – 450</b>	80 – 90%	B
	<b>351 – 400</b>	70 – 80%	C
	<b>301 – 350</b>	60 – 70%	D
	<b>&lt;300</b>	<60%	F

**Exams:** Exams will use a variety of question types including multiple choice, true/false, matching, short answer, and/or essay. **Please bring #2 pencils for all exams.** The two exams are scheduled at 11 am on **October 1** (Tuesday) and **November 7** (Thursday). The **final exam** will occur as scheduled during finals week. **Thursday, December 19, 2013, 10 am – Noon.**

**Quizzes:** Quizzes (3-5/semester) will be given during class periods **without** prior notice.

**Group Project:** Students are expected to complete one group project and detailed instruction with deadlines will be provided separately. If an assignment is submitted late, the grade point will be deducted for each day past the due date. The contents of **all** group projects will be included in the final exam.

**You are expected to attend every class.** If you are absent, you may miss a quiz, and you are not likely to fully understand the material covered in class, which will result in lower test grades. Make-up exams will only be given if the instructor knows of a student absence at least 24 hours prior to the exam. If the exam or quiz is missed due to illnesses or other causes, the make-up will only be given if the instructor is provided a written document, e.g. physician's note.

Students are encouraged to use **Bb Learn** as all lecture materials and announcements could be found in the site. All applicable assignments must be submitted via Bb Learn also, and students are responsible for learning proper technique for submission.

**Important!!** Please feel free to ASK questions in and out of the classroom regarding the course materials. Discussion with peers is highly encouraged and the instructor will try his best to satisfy your intellectual curiosity.

### **Students with Disabilities**

WSU students: Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the Access Center (Washington Building 217) to schedule an appointment with an Access Advisor. All accommodations MUST be approved through the Access Center.

UI students: Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through Disability Support Services located in the Idaho Commons Building, Room 306 (Phone 885-6307; Email [dss@uidaho.edu](mailto:dss@uidaho.edu); website at [www.uidaho.edu/dss](http://www.uidaho.edu/dss)) in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course.

### **Academic Regulations & Student Affairs Policy Regarding Absences**

It is the policy of the Office of Student Affairs to assist students during crisis situations where they are unable to notify their instructors prior to a hurried emergency departure. The Office of Student Affairs will send professors an "Emergency Notification" in those instances where the student will be away for more than two days. The Office of Student Affairs will not issue notifications retroactively or for "one-day emergencies."

**Academic Etiquette:** Please keep cellular phones silent during class.

**WSU Safety Statement;** Washington State University is committed to maintaining a safe environment for its faculty, staff, and students. Safety is the responsibility of every member of the campus community and individuals should know the appropriate actions to take when an emergency arises. In support of our commitment to the safety of the campus community the University has developed a Campus Safety Plan, <http://safetyplan.wsu.edu>. It is highly recommended that you visit this web site as well as the University emergency management web site at <http://oem.wsu.edu/emergencies> to become familiar with the information provided.

**University of Idaho Classroom Learning Civility Clause:** In any environment in which people gather to learn, it is essential that all members feel as free and safe as possible in their participation. To this end, it is expected that everyone in this course will be treated with mutual respect and civility, with an understanding that all of us (students, instructors, professors, guests, and teaching assistants) will be respectful and civil to one another in discussion, in action, in teaching, and in learning. Should you feel our classroom interactions do not reflect an environment of civility and respect, you are encouraged to meet with your instructor during office hours to discuss your concern. Additional resources for expression of concern or requesting support include the Dean of Students office and staff (5-6757), the UI Counseling & Testing Center's confidential services (5-6716), or the UI Office of Human Rights, Access, & Inclusion (5-4285).

**Academic integrity** will be strongly enforced in this course. Any student caught cheating on any assignment will be given an F grade for the course and will be reported to the Office Student Standards and Accountability. Cheating is defined in the Standards for Student Conduct WAC

504-26-010 (3). It is strongly suggested that you read and understand these definitions:  
<http://conduct.wsu.edu/policies/standards-of-conduct/>

### **Plagiarism and Academic Integrity Addendum:**

University of Idaho, Student Code of Conduct

Article II—Academic Honesty

1. Cheating on classroom or outside assignments, examinations, or tests is a violation of this code.
2. Plagiarism, falsification of academic records, and the acquisition or use of test materials without faculty authorization are considered forms of academic dishonesty and, as such, are violations of this code.
3. Because academic honesty and integrity are core values at a university, the faculty finds that even one incident of academic dishonesty seriously and critically endangers the essential operation of the university and may merit expulsion. [rev. 7-98]
4. The operation of UI requires the accuracy and protection of its records and documents. To use, make, forge, print, reproduce, copy, alter, remove, or destroy any record, document, or identification used or maintained by UI violates this code when done with intent to defraud or misinform.
5. All data acquired through participation in UI research programs is the property of the university and must be provided to the principal investigator. In addition, collaboration with the University Research Office for the assignment of rights, title, and interest in patentable inventions resulting from the research is also required [see 5400 A through E].
6. Entrance without proper authority into any private office or space of a member of the faculty, staff, or student body is a violation of this code.
7. It is also a violation to hack or make unauthorized use of any computer or information system maintained by the university or a member of the faculty, staff, or student body. [rev.7-05]
8. Instructors and students are responsible for maintaining academic standards and integrity in their classes. Consequences for academic dishonesty may be imposed by the course instructor. Such consequences may include but cannot exceed a grade of “F” in the course. The instructor should attempt to notify the student of the suspected academic dishonesty and give the student an opportunity to respond. The notice and the opportunity may be informal and need not be in writing. Penalties for any disciplinary infraction must be judicially imposed. [See 1640.02 C-5] [rev. 7-98]
9. Instructors may report incidents of academic dishonesty to the dean of students. Upon receiving such a report, the dean of students shall provide the student with written notice that a report has been made and an opportunity to meet with the dean to discuss the report. The dean of students shall maintain the report and any record of the meeting for a period of time deemed appropriate by the dean. The dean of students may file a complaint against the student after the meeting has taken place or the student has elected, either affirmatively or through inaction, not to meet with the dean. [add. 7-98]

For more information on academic integrity and academic dishonesty, please visit:  
<http://www.uidaho.edu/DOS/academicintegrity/Student%20Resources>

FS 110

**INTRODUCTION TO FOOD SCIENCE**

Fall 2014

**TENTATIVE LECTURE SCHEDULE**

<b>Lec #</b>	<b>Date</b>	<b>Subject</b>
1	Aug 26	Introduction; <u>Reading Assignment</u>
2	28	Overview of “Food Science”; Quality of Food
3	Sep 2	Objective Evaluation; <u>Reading Assignment</u>
4	4	Water
5	9	Carbohydrates
6	11	Starch, Pectins and Gums
7	16	Proteins ; <b>Due – Group project Signup</b>
8	18	Lipids
9	23	Emulsions and Foams; UI Library & Research guide
10	25	Review; Q/A
	<b>30</b>	<b>TEST 1</b> [Lec 1 through 10]
11	Oct 2	Food Processing
12	7	Food Processing; <b>Due – Group project Outline</b>
13	9	Milk & Dairy
14	14	Meat Processing
15	16	Meat Processing
16	21	Poultry & Eggs
17	23	Seafoods; <b>Due – Group project Draft</b>
18	28	Cereals and Cereal Based Foods
19	30	Cereals and Cereal Based Foods
20	Nov 4	Review; Q/A
	<b>6</b>	<b>TEST 2</b> [Lec 11 through 20]
21	11	Plant foods – Fruits and Vegetables
22	13	Food Packaging
23	18	Food Safety; <b>Due – Group project Final paper</b>
24	20	Food Safety; Food Additives
25	25	Sensory Evaluation & Food Product Development
	27	<i>No Class – Thanksgiving Holidays</i>
26	Dec 2	Laws & Regulations
27	4	Group Project Presentations
28	9	Group Project Presentations; Hot Topics
29	11	Review; Q/A
	<b>16</b>	<b>Comprehensive Final Exam 10:00 am – 12:00 pm</b>

*Students are responsible for material discussed in class, material contained in the assigned chapters, and for additional material given as handouts in class. Please read the assigned chapters and any handouts you are given! You are expected to take each test on the given dates unless prevented by circumstances beyond your control. **Make-up tests will only be allowed with written documentation.** Please let me know before the test if you cannot be present.*