FOS 4936 / FOS 6936
Food Safety Systems

Fall 2013

Course Hours & Location:
TR 2nd Period (8:30 to 9:20 am), Rinker Hall 230

Instructors:
Dr. Soohyoun (Soo) Ahn (course organizer)
Food Science and Human Nutrition
Room 215, AFPL Bldg.
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Phone: 352-392-1991, Ext 310
Office hours: T-TR 1:30 to 3:30 pm, all other times – by appointment only.

Dr. Renee Goodrich-Schneider
Food Science and Human Nutrition
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Phone: 352-392-1991, Ext 208
Office hours: W-TR 1:00 to 3:00 pm, all other times – by appointment only.

Dr. Keith R. Schneider
Food Science and Human Nutrition
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Phone: 352-392-1991, Ext 309
Office hours: T-TR 9:00 to 11:00 am, all other times – by appointment only.

Course Description: This course is designed to cover current issues in food supply chain including security and safety, industrial and international food safety concerns, various food safety control systems, and principles and practices of HACCP.

Text: There is NO required textbook for this course. However, two books are recommended as our primary textbooks for this course:

- HACCP: A Practical Approach, 3rd Ed. (Moltimore and Wallace), Springer
- Food Industry Quality Control Systems (Clute), CRC
There are other recommended books which you could buy from Amazon (free for Amazon primer members) and read using Kindle device.

- HACCP Implementation in Food Manufacturing: A Practical Guide (Kindle Ed.)
- BRC Standards Issue 6 Quality Manual Pack (Kindle Ed.)
- ISO 22000 Food Safety Management Quality Manual Pack (Kindle Ed.)

Supplemental notes and handouts will be distributed to class via Sakai system or email listserv.

Course Format: Students will acquire knowledge of the current food safety issues and various systems to control these issues through the lectures, class discussions, reading and assignments.

Course Objectives and Learning Goals:
After completing this course, students should
1. Recognize the importance of food safety and security to ensure public health
2. Identify the types of hazards, and list the factors promoting those hazards
3. Recognize importance of food safety in world trade
4. Recognize the usefulness of the HACCP system as a food protection tool
5. Understand the importance of risk analysis in food safety and how risk analysis can be done in food industry
6. Identify the international methodology and guidelines for microbial risk analysis in foods
7. Describe the role of federal, state and local jurisdictions in regulating and monitoring food safety and security assurance

Grading

<table>
<thead>
<tr>
<th>In-class exams (2)*</th>
<th>40 % (20% each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive final exam</td>
<td>30%</td>
</tr>
<tr>
<td>Team project</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
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*In-class exams (~50 min, closed book exam) will each cover 1/3 of the course materials and be equally weighted. The final will be comprehensive, but focused heavily on the last third of the course.

Grading scale:

<table>
<thead>
<tr>
<th>Passing grade</th>
<th>A</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
<th>D-</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Average %</td>
<td>90-100</td>
<td>87-89</td>
<td>83-86</td>
<td>80-82</td>
<td>77-79</td>
<td>73-76</td>
<td>70-72</td>
<td>67-69</td>
<td>63-66</td>
<td>60-62</td>
<td>&lt;60</td>
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Revision 8-14-13
Policy regarding Make-up exam / Late work submission:
Each exam will be given as scheduled in course outline (see below). Students must take the exams on the day scheduled. There will be NO MAKE-UP EXAMS except the case of verifiable emergencies or legitimate reasons (illness, family emergency). In those excusable circumstances, students MUST notify the instructor PRIOR TO the scheduled exam and provide proper proof afterwards. Instructor will refuse to give a chance to take a make-up exam unless a student provides the proof that the absence was excusable. All make-up exams MUST be taken within two days of the scheduled exam (so make-up by the following Wednesday for Monday exams; make-up by the following Friday for Wednesday exams). NO EXCEPTIONS!
Due dates will be assigned for each assignment and/or activity. All work must be completed by the designated due dates. No late work will be accepted (no exception).

Academic Honesty:
Student Honor Code from University of Florida will be enforced on the case of infringement of academic integrity, including plagiarism, cheating and prohibited collaboration or consultation. Details can be found at: https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx.

Disability Clause:
The Disability Resource Center provides services to students with physical, learning, sensory or psychological disabilities. These services include registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, and mediating any other disability-related issues. Disability Resource Center can be reached at 352-392-8565 or accessuf@dso.ufl.edu, and is located at 0001 Building 0020 (Reid Hall). Detailed information is available at: http://www.dso.ufl.edu/drc/.

Campus Helping Resources:
On-campus resources are available for students having personal problems that interfere with their wellbeing and/or academic performances. There resources are:
1. UF Counseling and Wellness Center (3190 Radio Road, 352-392-1575), http://www.counseling.ufl.edu/cwc/
2. Student Health Care Center (Infirmary Building, 280 Fletcher Drive, 352-392-1161), http://shcc.ufl.edu
3. UF Career Resource Center. (Reitz Union, 352-392-1601), http://www.crc.ufl.edu

Flexibility Clause: Circumstances may arise during the course that may prevent the instructor from fulfilling each and every component of this syllabus; therefore, syllabus should be viewed as a guide and is subject to change. Students will be notified of any changes.

Revision 8-14-13
Tentative Course Outline:
Week 1 (8/22) – Course introduction and overview (Ahn)
Week 2 (8/27, 8/29) – Food Safety Regulations (Ahn); Quality Control Systems (Sims)
Week 3 (9/3, 9/5) – Quality Control Systems (Ahn); FSMA (Schneider)
Week 4 (9/10, 9/12) – GMPs (Schneider); SSOPs (Schneider)
Week 5 (9/17, 9/19) – GAPs (Schneider); Exam 1
Week 6 (9/24, 9/26) – Intro to HACCP (Schneider); HACCP Principle 1 (Schneider)
Week 7 (10/1, 10/3) – HACCP Principle 2 (Schneider); HACCP Principle 3 (Schneider)
Week 8 (10/8, 10/10) – HACCP Principle 4; HACCP Principle 5 (Schneider)
Week 9 (10/15, 10/17) – HACCP Principle 6 (Goodrich); HACCP Principle 7 (Goodrich)
Week 10 (10/22, 10/24) – HACCP Review (Goodrich); Exam 2
Week 11 (10/29, 10/31) – ISO 22000 (Ahn); Projects Due, FSSC 22000 (Ahn)
Week 12 (11/5, 11/7) – Global Food Safety Initiative (GFSI) (Ahn)
Week 13 (11/12, 11/14) – GlobalGAP (Richard Yudin) BRC, SQF (Goodrich)
Week 14 (11/19, 11/21) – GFSI (Goodrich); Auditing (Goodrich)
Week 15 (11/26) – Food Code (Schneider)
Week 16 (12/3) – Review for comprehensive final (Ahn)
Week 17 (12/13) Final Exam