Food Safety Systems

Fall 2019

Course Hours & Location:
TR 2nd Period (8:30 to 9:20 am), Rinker (RNK) 0215

Instructors:
Dr. Soohyoun (Soo) Ahn (course organizer)
Food Science and Human Nutrition
Room 215, AFPL Bldg.
E-mail: sahn82@ufl.edu
Phone: 352-294-3909
Office hours: M/W 9:00 to 11:00 am, all other times – by appointment only.

Dr. Renee Goodrich-Schneider
Food Science and Human Nutrition
Room 329, FSHN Bldg.
E-mail: goodrich@ufl.edu
Phone: 352-294-3726
Office hours: W/R 1:00 to 3:00 pm, all other times – by appointment only.

Course Description: This course is designed to cover 1) current issues in food supply chain including security and safety in domestic and international food industry, 2) various food safety control systems, 3) principles of HACCP and FSMA Preventive controls. The course also provides hands-on practice in developing a food safety plan.

Text: There is NO required textbook for this course. However, several books are recommended as our primary textbooks for this course:
- FSMA and Food Safety Systems (Barach), Wiley
- HACCP: A Practical Approach, 3rd Ed. (Moltimore and Wallace), Springer
- Food Industry Quality Control Systems (Clute), CRC
- Food Safety Management (King), Springer

Supplemental notes and handouts will be distributed to class via Canvas 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

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<tr>
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<th>Percentage</th>
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<tbody>
<tr>
<td>In-class exams (3)*</td>
<td>60% (20% each)</td>
</tr>
<tr>
<td>Final Project (in lieu of final exam)</td>
<td>40%</td>
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<tr>
<td>Total</td>
<td>100%</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.

Grading scale:

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<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>
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<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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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. Make-up exams will be allowed only for the case of verifiable emergencies or legitimate reasons (illness, family emergency). In those excusable circumstances, students should 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.
Due date will be given in advance for the project. All work must be completed by the designated due dates. No late work will be accepted unless arrangement is made with the instructor beforehand.

**Academic Honesty:**
Student Honor and Conduct 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://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/](https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/).

**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@ufsa.ufl.edu, and is located at 0001 Building 0020 (Reid Hall). Detailed information is available at: [https://disability.ufl.edu/](https://disability.ufl.edu/).

**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](http://www.counseling.ufl.edu)
2. Student Health Care Center (Infirmary Building, 280 Fletcher Drive, 352-392-1161), [http://shcc.ufl.edu](http://shcc.ufl.edu)
3. UF Career Connections Center. (Reitz Union, Suite 1300, 352-392-1601), [https://career.ufl.edu/](https://career.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.

**Tentative Course Outline:**
Week 1 (8/20, 8/22) – Course introduction; Overview (Ahn)
Week 2 (8/27, 8/29) – Tools in Quality Control (Sims); Quality Control Systems (Sims)
Week 3 (9/3, 9/5) – GMPs (Ahn); SSOPs (Ahn)
Week 4 (9/10, 9/12) – Food Safety Regulations (Ahn)
Week 5 (9/17, 9/19) – **Exam 1**; Intro to HACCP (Ahn/Goodrich);
Week 6 (9/24, 9/26) – HACCP Principles (Goodrich)
Week 7 (10/1, 10/3) – HACCP Principle (Goodrich); FSMA Overview (Ahn)
Week 8 (10/8, 10/10) – FSMA Preventive Controls & Food Safety Plan (Ahn)
Week 9 (10/15, 10/17) – Food Safety Plan (Ahn); Review of HACCP/PC (Ahn)
Week 10 (10/22, 10/24) – **Exam 2**; Recall & Traceability (Guest Lecture: Dr. Archer)
Week 11 (10/29, 10/31) – Auditing and Inspection (Goodrich); FDA inspection (TBA)
Week 12 (11/5, 11/7) – Project introduction; GAPs (Guest Lecture: Dr. Schneider)
Week 13 (11/12, 11/14) – FSMA Produce Safety (Guest Lecture: Dr. Schneider)
Week 14 (11/19, 11/21) – **Exam 3**; GFSI and other food safety systems (Ahn)
Week 15 (11/26) – Project Work Day
Week 16 (12/3) – **Final Project Student Presentation**