

Course Title and Description

Sensory Evaluation of Food

FOS 6125C; 3 credits

Principles and techniques of sensory evaluation of foods

Instructor

Charles Sims

Room 130, Building 120

352-294-3592

csims@ufl.edu

Office hours: Tuesday 1:00 – 4:00 pm or other times as available or by appointment

Course Format

- Two lectures and a 2-hour laboratory each week
- Three unit exams
- Laboratory reports and homework assignments
- Tuesday and Thursday 10:40 – 11:30 (period 4) lecture, lab Thursday 1:00 – 3:00 (or to be arranged)

Course Objectives/Goals

- To understand the basics of taste and olfactory perception
- To understand the basic psychology of common sensory tests
- To be able to choose the proper sensory test for a wide range of common objectives
- To be able to conduct discrimination tests, consumer acceptability and preference tests, and descriptive analysis
- To be able to statistically analyze all data from sensory tests

Topics Covered

- Overview of sensory evaluation
- Physiological and psychological aspects of sensory evaluation
- Good practices for sensory evaluation
- Factors affecting sensory testing
- Discrimination testing
- Measuring responses
- Acceptance and preference testing
- Descriptive analysis
- Sensory thresholds
- Advanced statistical techniques

Grading System

- 300 points = 3 unit exams
- 140 points = 7 laboratory reports or homework
- 396-440 points (90-100%) = A; 374-395 points (85-89%) = B+; 352-373 points (80-84%) = B; 330-351 points (75-79%) = C+; 308-329 points (70-74%) = C; 286-307 points (65-69%) = D+; 264-285 points (60-64%) = D; 263 and below points (59% and below) = E

For more information on grading please refer to:
<http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>

Recommended Texts

Sensory Evaluation of Food: Principles and Practices, 2nd Edition. H.T. Lawless and H. Heymann. Springer, 2010. ISBN 978-1441964878.

Sensory Evaluation Techniques, 4th Edition. M.C. Meilgaard, G.V. Civille, and B.T. Carr. CRC Press, 2007. ISBN 978-0849338397

Class Policies

- Attendance is mandatory and will be checked at every class. More than 3 unexcused absences will result in a loss of 10 points from your final grade
- Please be on-time
- Make-up exams and lab exercises will only be allowed if adequate notice and documentation is given prior to the exam or lab
- Homework and lab reports are due 2 weeks from issue or the lab exercise
- Laptop computers are welcome in class

Lecture Overview and Reading Assignments

- Overview of sensory evaluation
 - Chap. 1 in Lawless, Chap. 1 in Meilgaard
- Physiological and psychological aspects of sensory testing
 - Chap. 2 in Lawless, Chap. 2&5 in Meilgaard
- Principles of good practice
 - Chap. 3 in Lawless, Chap. 3 in Meilgaard
- Factors affecting sensory testing
 - Chap. 9 in Lawless, Chap. 4 in Meilgaard
- Discrimination testing
 - Chap. 4&5 in Lawless, Chap. 6 in Meilgaard
- Measuring responses
 - Chap. 7&Appendix III in Lawless, Chap. 5&7 in Meilgaard
- Acceptance and Preference testing
 - Chap. 13 in Lawless, Chap. 7&12 in Meilgaard
- Descriptive Analysis
 - Chap. 10 in Lawless, Chap. 9,10,11 in Meilgaard
- Sensory threshold
 - Chap. 6 in Lawless, Chap. 8 in Meilgaard
- Advanced statistics
 - Handouts

Laboratory Exercises

- Physiological and Psychological Aspects
 - Basic tastes and interactions
 - Retronasal and orthonasal olfaction
 - PROP test
 - Interaction of taste and olfaction (miracle fruit, gymnma)
- Principles of Good Practice
 - Observe one of our sensory tests and critique
- Discrimination Testing
 - Calculate panelists numbers needed, level of significance
 - Triangle, duo-trio
- Measuring Responses
 - Computer examples of all statistics
 - Homework assignment
- Descriptive Analysis (2 lab periods)
 - Develop lexicon, train = 1st lab period
 - Train, evaluate products = next lab period
- Acceptance and Preference Testing (2 lab periods)
 - Students think of a sensory test and design as a team = 1st lab period
 - Conduct test = 2nd lab period
- Advanced Statistics
 - Go over calculations, homework
- Threshold
 - Go through the process of determining the threshold of a common taste compound

Academic Honesty, Software Use, UF Counseling Services, Services for Students with Disabilities

In 1995 the UF student body enacted a new honor code and voluntarily committed itself to the highest standards of honesty and integrity. When students enroll at the university, they commit themselves to the standard drafted and enacted by students.

In adopting this honor code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the university community. Students who enroll at the university commit to holding themselves and their peers to the high standard of honor required by the honor code. Any individual who becomes aware of a violation of the honor code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon community acceptance and enforcement of the honor code.

The Honor Pledge: We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.

On all work submitted for credit by students at the university, the following pledge is either required or implied: **“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”**

The university requires all members of its community to be honest in all endeavors. A fundamental principle is that the whole process of learning and pursuit of knowledge is diminished by cheating, plagiarism and other acts of academic dishonesty. In addition, every dishonest act in the academic environment affects other students adversely, from the skewing of the grading curve to giving unfair advantage for honors or for professional or graduate school admission. Therefore, the university will take severe action against dishonest students. Similarly, measures will be taken against faculty, staff and administrators who practice dishonest or demeaning behavior.

Students should report any condition that facilitates dishonesty to the instructor, department chair, college dean or Student Honor Court.

(Source: 2009-2010 Undergraduate Catalog)

It is assumed all work will be completed independently unless the assignment is defined as a group project, in writing by the instructor.

This policy will be vigorously upheld at all times in this course.

Software Use:

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general well-being are encouraged to utilize the university's counseling resources. Both the Counseling Center and Student Mental Health Services provide confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance. The Counseling Center is located at 301 Peabody Hall (next to Criser Hall). Student Mental Health Services is located on the second floor of the Student Health Care Center in the Infirmary.

- *University Counseling Center*, 301 Peabody Hall, 392-1575, www.counsel.ufl.edu
- *Career Resource Center*, CR-100 JWRU, 392-1601 ext: 0, www.crc.ufl.edu/
- *Student Mental Health Services*, Rm. 245 Student Health Care Center, 392-1171, www.shcc.ufl.edu/smhs/

Alcohol and Substance Abuse Program (ASAP)

Attention Deficit Hyperactivity Disorder (ADHD)

Center for Sexual Assault / Abuse Recovery & Education (CARE)

Eating Disorders Program

Employee Assistance Program

Suicide Prevention Program

Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues.

0001 Reid Hall, 392-8565, www.dso.ufl.edu/drc/