

Course Title and Description

Sensory Evaluation of Food

FOS 6125C; 3 credits

Principles and techniques of sensory evaluation of foods

Spring 2024

Instructors

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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
 - 120 points = 6 laboratory reports or homework
 - 378-420 points (90-100%) = A; 357-377 points (85-89%) = B+; 336-356 points (80-84%) = B; 315-335 points (75-79%) = C+; 294-314 points (70-74%) = C; 273-293 points (65-69%) = D+; 252-272 points (60-64%) = D; 251 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, 5th Edition. M.C. Meilgaard, G.V. Civille, and B.T. Carr. CRC Press, 2016. ISBN 13:978-1-4822-1690-5

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 – February 1
 - Basic tastes and interactions
 - Retronasal and orthonasal olfaction
 - PROP test
 - Interaction of taste and olfaction (miracle fruit, gymnma)
- Principles of Good Practice – Schedule on your own
 - Observe one of our sensory tests and critique
- Discrimination Testing – February 22
 - Calculate panelists numbers needed, level of significance
 - Triangle, duo-trio
- Measuring Responses – March 29 and homework on your own
 - Computer examples of all statistics
 - Homework assignment
 - Train, evaluate products = next lab period
- Acceptance and Preference Testing (2 lab periods) – April 11 and 18
 - Students think of a sensory test and design as a team = 1st lab period
 - Conduct test = 2nd lab period
- Descriptive Analysis (2 lab periods) – March 21 and 28
 - Develop lexicon, train = 1st lab period

Information for All Students

Policy on In-Class Recording

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor. A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the

same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student

Grades and Grade Points

For information on current UF policies for assigning grade points, see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

A statement related to class attendance and options for making up exams and other work. A standard statement is provided below.

Attendance and Make-Up Work

Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Online Course Evaluation Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results>.

Academic Honesty

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following 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." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g., assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students

Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: <http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code>.

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.

Services for 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. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides 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.

- University Counseling & Wellness Center, 3190 Radio Road, 352-392-1575, www.counseling.ufl.edu Counseling Services Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching
- U Matter We Care, www.umatter.ufl.edu/.
- Career Connections Center, First Floor JWRU, 392-1601, <https://career.ufl.edu/>.

Student Complaints

- Residential Course: <https://sccr.dso.ufl.edu/policies/student-honor-code-studentconduct-code/>.
- Online Course: <http://www.distance.ufl.edu/student-complaint-process>.