

SENSORY EVALUATION OF FOOD AND WINE LAB: FS 423 (1 cr), Spring 2013

Lab: Tuesdays 1:45 – 4:30

Instructor: Luis Castro

Office hours: 1:30-2:30 Monday and Wednesday, 1:30-2:30 Thursday or by appointment

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Lab Teaching Assistants:

Allison Baker

Office hours: Monday 2:00-4:00 or by appointment

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Campus Resources: Library, Writing Center

Course Abstract: This laboratory will provide a practical application of FSHN 422, including the theory, principles and applications of sensory evaluation techniques for the evaluation of appearance, aroma, flavor and texture of foods and wine.

Student Learning Outcomes:

Develop an understanding of the basic psychology and physiology of the senses and the basic sensory characteristics comprising food and wine quality.

- Describe sensory testing methodologies and outline capabilities and limitations of these methods.
- Design appropriate sensory tests, statistically analyze test data and draw meaningful conclusions from the results.
- Critically evaluate sensory research as presented in the scientific literature.
- Provide experience in evaluating the sensory properties of foods and wine.

Required Textbooks:

FS 423 Sensory Evaluation Laboratory Manual. Available at Crimson and Gray (~\$15).

Meilgaard, M., Civille, G., and Carr, B. 2007. Sensory Evaluation Techniques, Fourth Ed. CRC Press, New York. ISBN: 0-8493-3839-5.

Or the third edition of this text. ISBN: 0-8493-0276-5.

Pre-Requisite Courses: Stat 212: Introductory Statistical Methods; FS 422 Sensory Evaluation of Food and Wine (co- or pre-requisite)

Laboratory Outline:

1. Taste and flavour recognition and sensory interaction (20 pts) – Jan 22
2. Odour recognition in wine and wine sensory (20 pts) – Jan 29
3. Scaling methods: Ranking and rating (70 pts) – Feb 5

No lab – Feb 12
2012

4. Taster status determination (10 pts) – Feb 19
5. Overall difference testing (25 pts) – Feb 26
6. Attribute difference testing (20 pts) – March 5
7. Descriptive analysis I (20 pts) - March 19
8. Descriptive analysis II (60 pts) - March 26 (lab due on April 9)
9. Texture and colour (10 pts) – April 2
10. Affective tests (60 pts) – April 9
11. Product Development (15 pts) - April 16
12. Grad student presentations (required attendance, will deduct 20 pts from overall lab score for absence as described below) – April 23

Grade Breakdown: The grading rubric that will be used for evaluation is on pg. 5 of the syllabus.

330 points (Lab Reports – distribution shown above)

20 pts (Participation and attendance). Student will lose 20 points for an unexcused absence from lab.

TOTAL= 370 points

<u>Grade</u>	<u>% of Total Points</u>
A	>93.0
A-	90.0 - 92.9
B+	87.0 - 89.9
B	83.0 - 86.9
B-	80.0 - 82.9
C+	77.0 - 79.9
C	73.0 - 76.9
C-	70.0 - 72.9
D+	67.0 - 69.9
D	60.0 - 66.9
F	<59.9

Evidence of grading strategy and student learning outcomes:

Through experiential learning, specifically by evaluating products, designing tests, analyzing data and preparing lab reports, you will learn about the application of sensory evaluation.

Attendance Policies:

The best way to improve public speaking, beside practice, is through observation. Class attendance is mandatory. It is your responsibility to acquire missed handouts or notes. If you have one unexcused absence from class, you will lose 20 points from your participation/attendance points. Notify the instructor in advance if you have a justified class absence. Even with a justified class absence, your participation mark will be impacted. However, in crisis situations where the student is unable to notify their instructors prior to a hurried emergency departure, it is the policy of the Office of Student Affairs to assist students. 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.” With an excused absence, the student is still required to submit a completed lab report.

Instructor Expectations:**Instructional Methods:**

This class is a combination of lectures and class activities. Class participation is part of your grade.

Academic Etiquette:

Avoid conversations with fellow students, do not read a newspaper, and turn off cellular phones during class.

Study help:

As everyone has their own learning style, many differs in how to study for examinations. To help students with their studying, a professor at the State University of New York (Buffalo campus) has designed an excellent website titled, “How to study: A brief guide.” The website contains information from how to take notes in lecture to studying ideas for examinations. If your grades are not what you would likethem to be, see if there is information on this professor’s website that could be useful:

<http://www/cse.buffalo.edu/~rapaport/howtostudy.html>

Student Policies:

Students are encouraged to consult the WSU Student Handbook for information related to student policies and procedures

(<https://saed.wsu.edu/Content/Documents/saed/student%20handbook%200601092.pdf>).

Students with Disabilities

(WSU students) Students with Disabilities: 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. All accommodations MUST be approved through the Access Center (Washington Building, Room 217). Please stop by or call 509-335-3417 to make an appointment with an Access Advisor. (<http://drc.wsu.edu/default.asp?PageID=1799>)

(UI students) Disability Support Services Reasonable Accommodations Statement: Reasonable accommodations are available for students who have documented temporary or permanent disabilities. Please notify your instructor(s) during the first week of class regarding accommodation(s) needed for the course. All accommodations must be approved through Disability Support Services located in the Idaho Commons Building, Room 306; phone 885-6307; email at dss@uidaho.edu; website at www.access.uidaho.edu or www.webs.uidaho.edu/taap.

Academic Regulations & Student Affairs Policy Regarding Absences

It is the policy of the WSU 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.” Attendance will only impact earned grade if student does not participate in lecture.

Academic Dishonesty/Etiquette/Safety:

Academic integrity will be strongly enforced in this course. Cases of academic dishonesty shall be processed in accordance with academic integrity policies as stated in the *Washington State University Student Handbook, Faculty Manual* (WSU students) or the *University of Idaho Faculty Staff Handbook* (UI students).

Safety:

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 (<http://oem.wsu.edu/emergencies>) to become familiar with the information provided. Other safety information can be accessed through the WSU ALERT site (<http://alert.wsu.edu>).

Plagiarism:

WSU's Academic Integrity Statement* "As an institution of higher education, Washington State University is committed to principles of truth and academic honesty. All members of the University community share the responsibility for maintaining and supporting these principles. When a student enrolls in Washington State University, the student assumes an obligation to pursue academic endeavors in a manner consistent with the standards of academic integrity adopted by the University. To maintain the academic integrity of the community, the University cannot tolerate acts of academic dishonesty including any forms of cheating, plagiarism, or fabrication. Washington State University reserves the right and the power to discipline or to exclude students who engage in academic dishonesty." *

Academic Integrity Statement and link to WSU's policy:

www.conduct.wsu.edu/default.asp?PageID=343

www.wsulibs.wsu.edu/plagiarism/main.html

Plagiarism is defined by Webster's Dictionary as, "to steal and pass off the ideas or words of another as one's own." There are two general forms of plagiarism:

- (a) Unintentional: the use of other writers' words, phrases, sentences, paragraphs as though they were your own *without understanding* the need to cite the original source. Unintentional plagiarism normally occurs when the individual does not understand the conventions of scientific writing and the need to cite sources of information.
- (b) Intentional: the use of another writers' work and claiming it as your own. Intentional plagiarism includes *knowingly copying* or incorporating sections of books, articles, or other sources into your work without citation.

To evade plagiarism, you must acknowledge the source of information. In scientific writing, this can be performed in the text of your work through the use of surnames of authors and the year of publication (*e.g.*, Edwards et al., 2003) or by using numbers enclosed by parentheses which correspond to specific citations in the reference section. In addition to employing citations in the text, plagiarism can be avoided by applying special techniques when writing about information obtained from a source:

- (a) Paraphrase: rewording information in which you accurately present the main ideas from the source but do so using your own organization, words, and sentence structures.
 - (b) Summary: a concise statement of the main idea from a section within a source.
 - (c) Direct quotation: use of quotes surrounding the passage written by another author.
- In general, paraphrasing (a) and the use of summary statements (b) are very common techniques used in scientific writing. Use of quotations (c) in scientific writing is rare and should be avoided.

Plagiarism is dishonest and is **not** tolerated. If caught using all or portions of a current or former classmate's writing or other sources of information (*e.g.*, purchase a paper), a grade of "zero" will be given for the exercise. Additional penalties for plagiarism are possible as outlined in the *Washington State University Student Handbook*.

Assignments

1. Laboratory Reports: Lab reports are due 1 week after assigned except for labs 3 and 8 for which you have 2 weeks to complete. Grades reflect the detail and level of analysis required. Lab report formats will vary based on the lab. Specific details for each lab are outlined in the FS 423 Lab Manual. This is available for purchase Crimson and Gray. 10 points will be deducted for each day that a lab report is late.

1) Identifies, summarizes, and defines the **issue or problem** at hand.

Emerging **Developing** **Mastering**

Low 1 2 3 4 5 6
High

Overlooks or oversimplifies the complexity of the issue or problem.	Clearly identifies and summarizes the issue or problem at hand.
Identifies a different and inappropriate issue or problem.	Identifies the embedded or implicit aspects, addressing their relationships.

2) Clearly states **purposes, objectives, or hypotheses**.

Emerging **Developing** **Mastering**

Low 1 2 3 4 5 6
High

Does not clearly or concisely state the purposes, objectives, or hypotheses.	Clearly and concisely states purposes, objectives, or hypotheses.
Does not adequately examine or justify the purposes, objectives, or hypotheses.	Adequately examines and justifies the purpose, objectives, or hypotheses.

3) Explains **designs and/or methods** used to accomplish objectives or test hypotheses.

Emerging **Developing** **Mastering**

Low 1 2 3 4 5 6
High

Does not clearly identify or explain the appropriateness of the methods or design.	Clearly identifies and explains the appropriateness of the methods or design.
Does not clearly identify or explain how the methods or design relate to purposes, objectives, or hypotheses.	Clearly identifies and explains how methods or design relate to purposes, objectives, or hypotheses.
Does not adequately describe test methodology.	Adequately describes test methodology.

4) Presents **observations and results** in a complete, logical and clear fashion.

<u>Emerging</u>		<u>Developing</u>		<u>Mastering</u>		
Low	1	2	3	4	5	6
						High
<p>Does not present observations or results.</p> <p>Presentation of observations/results is unorganized and difficult to follow.</p> <p>Images, graphics, and tables do not accurately depict observations/results, are poorly placed, lack necessary identification, or are not consistent with the specified purposes, objectives, or hypotheses.</p> <p>Necessary calculations used in exercise/experiment are not included, or are used incorrectly.</p> <p>Fails to summarize background literature supporting the issue or problem.</p>			<p>Presents observations or results.</p> <p>Presentation of observations/results is logically organized and arranged.</p> <p>Images, graphics, and tables accurately depict observations/results, are carefully placed, clearly identified, engage the audience in thoughtful reflection, and serve a function consistent with the specified purposes, objectives, or hypotheses.</p> <p>Calculations are used clearly and correctly.</p> <p>Summarizes literature supporting issue or problem.</p>			

5) Assesses, discusses, and reconciles the **supporting data/evidence** acquired from the exercise/experiment in relation to the existing scientific literature.

<u>Emerging</u>		<u>Developing</u>		<u>Mastering</u>		
Low	1	2	3	4	5	6
						High
<p>Confuses observation with interpretation.</p> <p>Merely repeats information provided, taking it as truth, or fails to provide adequate justification for statements.</p> <p>Fails to obtain, relate, or reconcile evidence with published scientific literature. Provides only a shallow survey of viable literature.</p> <p>Does not distinguish between fact, opinion, and value judgments.</p> <p>Confuses associations and correlations with cause and effect.</p> <p>Technologies related to information</p>			<p>Clearly distinguishes between observation and interpretation.</p> <p>Examines the evidence, questions its accuracy, precision, relevance, and completeness, relates or reconciles evidence with published scientific literature.</p> <p>Identifies and synthesizes the scientific facts, data, principles, and processes embedded in the issue or problem and recognizes the nuances of them as well.</p> <p>Clearly distinguishes between fact and opinion, and acknowledges value judgments.</p> <p>Properly utilizes correlations and associations to explain existing or potential consequences.</p> <p>Evidence of appropriate use of statistical</p>			

gathering and data analysis is used improperly.	software and other information technologies.
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6) Identifies **conclusions, implications and consequences**.

<u>Emerging</u>	<u>Developing</u>			<u>Mastering</u>		
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Low	1	2	3	4	5	6
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High

<p>Fails to clearly and correctly identify conclusions, implications, and consequences in relation to context, implications, assumptions, data, and evidence.</p> <p>Conclusions/claims lack scientific support or justification. Brings in information not previously addressed.</p> <p>Does not provide indication of reflection on own assertions and/or responses.</p> <p>Recommendations are weak and do not extend beyond the existing body of knowledge and experience.</p>	<p>Identifies and clearly states conclusions, implications, and consequences considering context, assumptions, data, and evidence.</p> <p>Conclusions are scientifically sound and are clearly supported by the provided evidence.</p> <p>Objectively reflects upon own assertions and/or responses to the problem.</p> <p>Articulates clear and thoughtful recommendations in a manner that builds upon the body of knowledge and experience.</p>
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7) Effectively **organizes and articulates** information to promote understanding and communicate significance of the issue or problem.

<u>Emerging</u>	<u>Developing</u>			<u>Mastering</u>		
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Low	1	2	3	4	5	6
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High

<p>Title is general and lacks descriptive detail.</p> <p>Text is poorly organized and lack clarity.</p> <p>Multiple spelling and grammatical errors make the writing awkward, disorganized or confusing to reader.</p> <p>The overall style and organization do not address the intended audience, do not follow a logical order, and fail to unify or link important aspects of the project necessary to promote understanding of the issue or problem.</p> <p>Supporting literature is not fully or accurately cited.</p>	<p>Title is sufficiently descriptive and informative.</p> <p>Text is clear and well organized.</p> <p>Text contains few or no spelling or grammatical errors.</p> <p>The overall style and organization consider the audience, follow a logical order, and unify all aspects of the project to maximize understanding of the problem or issue.</p> <p>Supporting literature is fully and accurately cited.</p>
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8) Demonstrates leadership and teamwork.

Emerging		Developing		Mastering		
Low	1	2	3	4	5	6
						High
<p>Works in isolation, is tentative, or, alternately, is domineering.</p> <p>Performance is unprofessional: takes responsibilities lightly, is late with work, or contributions to team are perfunctory.</p> <p>Does not encourage elaboration of thoughts, pronounces answers right or wrong, does not probe, question, or encourage critical consideration of perspectives and resources.</p>			<p>Provides leadership and support to integrated groups of individuals focused toward a common goal.</p> <p>Demonstrates initiative for forming and contributing to the group.</p> <p>Coaches and encourages rather than complains or quits when the team performance is less than satisfactory.</p> <p>Demonstrates a willingness to listen to and consider other viewpoints.</p> <p>Encourages participants to engage one another in a critical analysis of the issues using the language (or the criteria) of the discipline.</p>			