ANSC/POUL 5730/6730
Sensory Evaluation
(3) LEC. 2, LAB. 2

Instructors:

Dr. Christy Bratcher
Room 144 Upchurch Hall
Auburn University
Phone: 844-1517
Email: cbratcher@auburn.edu
Office Hours: By appointment

Dr. Pat Curtis
Room 201A Poultry Science Building
Auburn University
Phone: 844-2679
Email: Pat.Curtis@auburn.edu
Office Hours: By appointment

Required Text and Lab Manual:

Recommended Reading:
Handbook of Meat, Poultry & Seafood Quality, Leo M.L. Nollet (Editor), copies on reserve at the Reference Desk in RBD Library.

Course Description:
History of sensory testing of food products derived from animals, comparisons of methods used and factors affecting results. Credit will not be allowed for taking more than any one of the following: ANSC-5730, POUL-5730, ANSC-6730 and POUL-6730.

Pre-requisite:
STAT-2510 or equivalent.

Course Objectives:
1) Acquaint all students with objective methods used for sensory evaluation.
2) Provide all students with practical skills necessary to complete a sensory experiment and collect data.
3) Graduate students will be able to design experiments and obtain objective sensory data.
4) Graduate students will be able to present a research-based oral presentation as they would at a regional or national meeting. (12 min with 3 min questions)

Course Content and Schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>History of Sensory Testing</td>
<td>Super-tasting</td>
</tr>
<tr>
<td></td>
<td>Human Biology and Physiology</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Physiological Aspects</td>
<td>Intro into Chemical Senses</td>
</tr>
<tr>
<td>3</td>
<td>Testing Conditions</td>
<td>Threshold Testing</td>
</tr>
<tr>
<td>4</td>
<td>Factors to Test and Objective Testing</td>
<td>Objective Measures</td>
</tr>
<tr>
<td>5</td>
<td>Statistics Overview</td>
<td>Excel and SAS</td>
</tr>
<tr>
<td>6</td>
<td>Statistics Applications / Mid-term</td>
<td>Time-Intensity Testing</td>
</tr>
<tr>
<td></td>
<td>Discrimination Testing</td>
<td>Application of Discrimination Testing</td>
</tr>
<tr>
<td>---</td>
<td>------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>8</td>
<td>Affective Testing</td>
<td>Application of Affective Testing</td>
</tr>
<tr>
<td>9</td>
<td>Descriptive Analysis</td>
<td>Descriptive Analysis</td>
</tr>
<tr>
<td>10</td>
<td>Consumer Studies</td>
<td>Application of Consumer Studies</td>
</tr>
<tr>
<td>11</td>
<td>Consumer Studies</td>
<td>Application of Consumer Studies</td>
</tr>
<tr>
<td>12</td>
<td>Consumer Studies</td>
<td>Application of Consumer Studies</td>
</tr>
<tr>
<td>13</td>
<td>Design of Experiments</td>
<td>Ballot Design</td>
</tr>
<tr>
<td>14</td>
<td>Conducting of Undergraduate/Graduate Student Projects</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Presentation of Project results by Graduate Students to Undergraduates</td>
<td></td>
</tr>
</tbody>
</table>

**Course Requirements:**

**Quizzes:**
Students will be given eleven 10-point lecture quizzes during weeks 1-5 and 7-12 to monitor progress, and the lowest quiz grade will be dropped (100 points total).

**Exams:**
Two 100 point tests will be given, a mid-term and a final (200 points total).

**Laboratory:**
Laboratory reports for labs 1-13 will be due at the beginning of the following lab every week and will be worth 25 points each (325 points total). Laboratory reports must be typed in the style and format of a “Journal of Food Science” article. Copies of the journal’s most recent Guidelines for Authors will be distributed and explained.

**Project:**

*Undergraduate students:* Undergraduate students enrolled in the course will be divided into teams of approximately four students each. Each team will be given a product to evaluate during the 14th week of the semester using an assigned method of sensory analysis. Each team member will then write a paper on the process and outcome of their sensory analysis (25 points). Each team member will also fill out a confidential evaluation including participation of team members and critiques of the project as a whole.

*Graduate students:* To further develop critical and analytical skills of graduate students, they will be required to design and conduct an evaluation of their own using an approved objective measure for comparing their sensory results based on current scientific literature and industry standards in the field (75 points). Graduate students will then be assigned as a “Leader” for one of the undergraduate teams during the 14th week of the semester (see above) to lead their “team” through the sensory evaluation study they have designed (50 points). During the 15th week, graduate students will then present the results of their individual and team projects to the instructors and undergraduate students in a research-based oral presentation format as they would at a regional or national meeting for the discipline (50 points; 175 total points for the project).
Course Grading:
Undergraduate Students:
11 Quizzes (@10 points each) 100 points
And drop the lowest
2 Exams (mid-term & final) 200 points
13 Lab Reports (@25 each) 325 points
Project 25 points
Total 650 points

Graduate Students:
11 Quizzes (@ 10 points each) 100 points
And drop the lowest
2 Exams (mid-term & final) 200 points
13 Lab Reports (@25 each) 325 points
Project/Presentation
Design & testing 75 points
Instruction of undergrads 50 points
Presentation of results 50 points
Total 800 points

Grade Distribution (10-point scale):
A ≥ 585
B ≥ 520
C ≥ 455
D ≥ 390
F < 390

Grade Distribution (10-point scale):
A ≥ 675
B ≥ 600
C ≥ 525
D ≥ 450
F < 450

Class Policy Statements:
General:
Grades will be determined using the above scale with no forced distribution. Students will be expected to be prepared for class by printing notes and reading assigned material prior to class. Relevant material from the textbook as well as the laboratory manual and lecture notes both provided on the web and anything presented in lecture on will be used for exam material. Any make-up work (excused absences only) must be completed within one week of returning to class or a grade of zero will be recorded. While we all have emergencies and may need to be reached, it is classroom courtesy that all cell phones be put on silent so as to not disturb those trying to learn around you. No using of the cell phones for call or texting will be allowed at any time. If there is a dire emergency, please be courteous of your classmates and step out quietly.

Academic Misconduct:
The University Academic Honesty Code (SGA Code of Laws, Chapter 1200; see “Tiger Cub”) will be followed in the event of academic misconduct.

Disability Accommodations:
Students who need accommodation are asked to arrange a meeting during the first week of classes, or as soon as possible if accommodations are needed immediately.

Justification for Graduate Credit:
This class should be considered for graduate credit due to the depth of the material. This is not an introductory level class. We will be going beyond the introductory level in the execution of laboratory exercises and in the project that graduate students will be responsible for. See the graduate student project description above.