NUTR 45300 Food Chemistry

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Course Information
Fall 2012
MWF, 9:30-10:20, BRNG 2280
http://www.cfs.purdue.edu/fn/fn453/index.html

Course Description
Application of fundamental laws and concepts of chemistry, physics, and biology to the properties, composition, and storage of foods.

Course Goals and Objectives
To identify the chemical components in foods in terms of their structures, reactions, and interactions, with special emphasis on structure-activity relationships.

To define the chemical, physical, and biological changes in food constituents as a result of heating, freezing, alterations in pH, storage, and other preparation, processing, or preservation techniques.

To match the localization of chemical constituents in food to their function and aesthetic qualities in foods.

To explain the role of constituents added to food during processing (food additives).

To demonstrate the equipment and methods used to evaluate foods.

To be able to design, execute, and report (both orally and in written form) on an independent research project. As a part of this project you will document your research, acquire a basic knowledge of research methodologies, and utilize the fundamentals of
the scientific method in your research. In both your written and oral presentation for this class you will critically interpret current research from the literature and discuss how (and why) your findings are similar to or different from these results.

Course Requirements
Point yielding assignments are listed below. For the due dates consult the course outline on the web here [http://www.cfs.purdue.edu/fn/fn453/outline.html](http://www.cfs.purdue.edu/fn/fn453/outline.html).

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Total points</th>
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<tbody>
<tr>
<td>Exams</td>
<td>500 points</td>
</tr>
<tr>
<td>Formal lab reports</td>
<td>100 points</td>
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<tr>
<td>Lab performance</td>
<td>80 points</td>
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<tr>
<td>Research project proposal</td>
<td>50 points</td>
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<tr>
<td>Teammate evaluation</td>
<td>20 points</td>
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<tr>
<td>Oral report</td>
<td>50 points</td>
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<tr>
<td>Written report</td>
<td>100 points</td>
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<tr>
<td><strong>Total points</strong></td>
<td><strong>900 points</strong></td>
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Required Texts

Food Chemistry Lecture Notes, v. 5.0, 2012, Dr. J. R. Daniel (available from BoilerCopyMaker, PMU, Room 157)


Policies
**General Course Policies**
I will return your email messages as soon as practicable. If you have to arrive late do so as unobtrusively as possible. If there is a good reason you need to leave early, let me know the reason and then leave as quietly as possible. Put your cellphone on silent mode in class. If you use a laptop in lecture it should be for class-related activities.

**Grading**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>900-810 points</td>
<td>100-90%</td>
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<tr>
<td>B</td>
<td>809-720 points</td>
<td>89-80%</td>
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<tr>
<td>C</td>
<td>719-630 points</td>
<td>79-70%</td>
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<tr>
<td>D</td>
<td>629-540 points</td>
<td>69-60%</td>
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<tr>
<td>F</td>
<td>549 or less</td>
<td>Less than 60%</td>
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**Academic Dishonesty**

Purdue prohibits "dishonesty in connection with any University activity. Cheating, plagiarism, or knowingly furnishing false information to the University are examples of dishonesty." [Part 5, Section III-B-2-a, University Regulations] Furthermore, the University Senate has stipulated that "the commitment of acts of cheating, lying, and deceit in any of their diverse forms (such as the use of substitutes for taking examinations, the use of illegal cribs, plagiarism, and copying during examinations) is dishonest and must not be tolerated. Moreover, knowingly to aid and abet, directly or indirectly, other parties in committing dishonest acts is in itself dishonest." [University Senate Document 72-18, December 15, 1972]

**Attendance**

Attendance at each class session is strongly encouraged. In the case that you miss a class you should make sure to catch up your class notes by reference to the Archive on the web site here [http://www.cfs.purdue.edu/fn/fn453/archive.html](http://www.cfs.purdue.edu/fn/fn453/archive.html). Also, feel free to talk to Dr. Daniel about what you missed.

Students are expected to be present for every meeting of the classes in which they are enrolled. Only the instructor can excuse a student from a course requirement or responsibility. When conflicts or absences can be anticipated, such as for many University sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible...For unanticipated or emergency absences when advance notification to an instructor is not possible, the student should contact the instructor as soon as possible by email, or by contacting the main office that offers the course. When the student is unable to make direct contact with the instructor and is unable to leave word with the instructor’s department because of circumstances beyond the student’s control, and in cases of bereavement, the student or the student’s representative should contact the Office of the Dean of Students.

**Grief Absence Policy for Students**

Purdue University recognizes that a time of bereavement is very difficult for a student. The University therefore provides the following rights to students facing the loss of a family member through the Grief Absence Policy for Students (GAPS). GAPS Policy: Students will be excused for funeral leave and given the opportunity to earn equivalent credit and to demonstrate evidence of meeting the learning outcomes for missed assignments or assessments in the event of the death of a member of the student’s family.
Missed or Late Work
Assignments are due on the dates listed in the outline on the web. If an assignment comes in 1 day late it will be worth half of its original value. If it is 2 days late it is worth zero points. This applies to all assignments (including team evaluation forms for the research project). No exams are allowed to be made up without prior approval (you must have a VERY GOOD reason to miss an exam).

Violent Behavior Policy
Purdue University is committed to providing a safe and secure campus environment for members of the university community. Purdue strives to create an educational environment for students and a work environment for employees that promote educational and career goals. Violent Behavior impedes such goals. Therefore, Violent Behavior is prohibited in or on any University Facility or while participating in any university activity.

Students with Disabilities
Purdue University is required to respond to the needs of the students with disabilities as outlined in both the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 through the provision of auxiliary aids and services that allow a student with a disability to fully access and participate in the programs, services, and activities at Purdue University.
If you have a disability that requires special academic accommodation, please make an appointment to speak with me within the first three (3) weeks of the semester in order to discuss any adjustments. It is important that we talk about this at the beginning of the semester. It is the student's responsibility to notify the Disability Resource Center (http://www.purdue.edu/drc) of an impairment/condition that may require accommodations and/or classroom modifications.

Emergencies
In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. Here are ways to get information about changes in this course: Blackboard Learn web page, https://mycourses.purdue.edu/, the HHS server course web page, http://www.cfs.purdue.edu/fn/fn453/index.html, Dr. Daniel's email address, danieljr@purdue.edu, or Dr. Daniel's office phone: 494-8247.

Nondiscrimination
Purdue University is committed to maintaining a community which recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and mutual respect among its members; and encourages each individual to strive to reach his or her own potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that
diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life.

Purdue University prohibits discrimination against any member of the University community on the basis of race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability, or status as a veteran. The University will conduct its programs, services and activities consistent with applicable federal, state and local laws, regulations and orders and in conformance with the procedures and limitations as set forth in Executive Memorandum No. D-1, which provides specific contractual rights and remedies.

Class Schedule
See the course outline on the web site here http://www.cfs.purdue.edu/fn/fn453/outline.html. This syllabus is subject to change (but change is very unlikely).