Major Curricular Change Form - Course

Future Effective Date: 08/01/2012

☐ New course   ☐ Temporary course   ☐ Drop service course
☐ Variable credit
☐ Increase credit (former credit __________)
☐ Number (former number __________)
☐ Crosslisting (between WSU departments)
   (Must have both departmental signatures)
☐ Conjoint listing (400/500)
☐ Request to meet Writing in the Major [M] requirement (Must have All-University Writing Committee Approval)
☐ Request to meet GER in __________ (Must have GenEd Committee Approval)
☐ Professional course (Pharmacy & Vet Med only)   ☐ Graduate credit (professional programs only)
☐ Other (please list request)

FS course prefix: 538 course no.

Introduction to Physical Properties of Foods

2 lecture hrs / week  2 lab hrs / week  0 studio hrs / week

Recommend 140 and FS 432; FS 460; Math 315 or Permission, Recommended Math 140;
prerequisite

Description (20 words or less) Thermophysical behavior of foods and biopolymers, including water transport/activity, rheological, thermal, dielectric, and barrier properties. Newtonian and non-Newtonian flow; Viscous, viscoelastic, and Hookean behavior. Relationship between rheology of food biopolymers and structure, composition, temperature, and plasticizer content.

Contact: Jodi Anderson
Phone number: (208) 885-9863
Email: unindo@uidaho.edu

Campus Zip Code: 6370
Phone number: 335-4763
Email: jlanderson@wsu.edu

Please attach rationale for your request, a current and complete syllabus, and explain how this impacts other units in Pullman and other branches (if applicable).

Secure all required signatures and provide 10 copies to the Registrar’s Office.

Denise McMorris 10-7-11
Chair/date

Jodi Anderson 11-1-11
Dean/date

General Education Com/date

All-University Writing Com/date

Academic Affairs Com/date

Graduate Studies Com/date

Senate/date

If the proposed change impacts or involves collaboration with other units, use the additional signature lines provided.
Rationale for this request – FS 538 Introduction to Physical Properties of Foods

As the School of Food Science, we cooperatively list the classes that are offered on the UI campus so they can be offered to the WSU students. This course does not impact the teaching load of a WSU Faculty, nor does it impact any other WSU unit since this material is not currently available at WSU.

Historically, this course has been offered to Food Science students as a special topics course. This course has been updated to meet current industry standards. This course is part of the FS curriculum for graduate level students as recommended by the SFS graduate curriculum committee. This course will not increase the instructor’s workload. To maintain strong enrollment, this course will be offered in the spring semester, in alternative years.
FS 538: Introduction to Physical Properties of Foods  
Spring Semester  
(2 credits)

Instructor: Dr. Caleb Nindo  
School of Food Science, Agr. Sci. Bldg. 119  
University of Idaho  
Ph: (208)-885-9683; E-mail: cnindo@uidaho.edu  

Class Hours:  
3:30-4:30 T, Th

Office Hours: After the class

Textbook:  
Rheological methods in food process engineering. By Jim Steffe  
(Available Online: www.egr.msu.edu/~steffe/)

Other Reference Texts:  
Food Physics. By Ludger Figura and Arthur Teixeira; Springer  
Engineering Properties of Foods. By Rao, Rizvi and Datta, Taylor & Francis

Catalog Description:  
Thermophysical behavior of foods and biopolymers, including water transport/activity, rheological, thermal, dielectric, and barrier properties. Newtonian and non-Newtonian flow; Viscous, viscoelastic, and Hookean behavior. Relationship between rheology of food biopolymers and structure, composition, temperature, and plasticizer content. Recommended preparation one undergraduate course in calculus. Pre-req: FS 432, FS 460, Math 310 Or Permission.

Course Objectives:  
To learn the thermophysical properties of food and related biomaterials and their applications in processing, handling, and storage. To characterize both solid and liquid foods using rheological and thermal analysis techniques.

Learning Outcomes:  
The students will understand the science and engineering concepts for characterizing the thermophysical behavior of foods and related biomaterials. Students will know the basic principles needed to select and operate rheological and thermal analysis instruments, design rheological experiments and interpret the data.

Grading and Grade Distribution:  
Homework: 30%  
Mid-Term Exam: 35%  
Final Exam: 35%


UI:  100-90=A, 89-80=B, 79-70=C, 69-60=D, <60=F

Campus Resources:  UI Library; WSU Library; UI Writing Center; WSU Writing Center

Academic Etiquette: Do not carry on side conversations or read the newspaper during class. Please turn off cellular phones during class.
Attendance policy:

Academic Regulations Regarding Class Attendance: Students are responsible for class attendance; in all cases of absence, students are accountable for the work missed. In the case of officially approved absence and on the request of the student, the instructor is obligated to provide an opportunity for the student to make up for missed work. In general, an absence is considered "official" when the student is: (a) participating in an approved field trip or other official UI or activity (e.g., athletics, debate, music, or theatre arts); (b) confined under doctor’s orders; (c) called to active military duty during emergency situations; or (d) granted a leave of absence from UI for reasonable cause by his or her academic dean.

Disability Support Services Reasonable Accommodations Statement:

UI: 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 208-885-6307; email at dss@uidaho.edu; website at www.access.uidaho.edu.

Students should present a completed and signed Accommodation Checklist for the current semester from Disability Support Services when requesting accommodations. This checklist should not be presented before or after class, but during office hours. If you do not have a current checklist both completed and signed, please go to Disability Support Services (Idaho Commons, Room 306) to obtain one.

WSU: 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 Disability Resource Center (DRC). All accommodations MUST be approved through the DRC (Washington Building, Room 217). Please stop by or call 509-335-3417 to make an appointment with a disability specialist.

Plagiarism statement and link to UI and WSU academic integrity statements:

Academic Dishonesty: Cases of academic dishonesty shall be processed in accordance with the Academic Integrity Policy. See the University of Idaho’s Dean of Students website: (http://www.students.uidaho.edu/default.aspx?pid=56186) and respective universities’ Student Handbooks, Faculty Manuals, and Office of Student Affairs.

Plagiarism:

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 other 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 avoid 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 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:

(i) 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.

(ii) Summary: a concise statement of the main idea from a section within a source.

(iii) Direct quotation: use of quotes surrounding the passage written by another author.

In general, paraphrasing (i) and the use of summary statements (ii) are very common techniques used in scientific writing. Use of quotations (iii) 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, a grade of “zero” will be given for the exercise. Additional penalties for plagiarism are possible as outlined by the UI Dean of Students (http://www.students.uidaho.edu/default.aspx?pid=56186) and WSU Student Handbook.

Plagiarism and Academic Integrity Addendum:

University of Idaho, Faculty Staff Handbook

Article II--Academic Honesty. [section renumbered 8-07]

1. Cheating on classroom or outside assignments, examinations, or tests is a violation of this code.

2. Plagiarism, falsification of academic records, and the acquisition or use of test materials without faculty authorization are considered forms of academic dishonesty and, as such, are violations of this code.

3. Because academic honesty and integrity are core values at a university, the faculty finds that even one incident of academic dishonesty seriously and critically endangers the essential operation of the university and may merit expulsion. [rev. 7-98]

4. The operation of UI requires the accuracy and protection of its records and documents. To use, make, forge, print, reproduce, copy, alter, remove, or destroy any record, document, or identification used or maintained by UI violates this code when done with intent to defraud or misinform.

5. All data acquired through participation in UI research programs is the property of the university and must be provided to the principal investigator. In addition, collaboration with the University Research Office for the assignment of rights, title, and interest in patentable inventions resulting from the research is also required [see 5400 A through E].

6. Entrance without proper authority into any private office or space of a member of the faculty, staff, or student body is a violation of this code.

7. It is also a violation to hack or make unauthorized use of any computer or information system maintained by the university or a member of the faculty, staff, or student body. [rev.7-05]

8. Instructors and students are responsible for maintaining academic standards and integrity in their classes. Consequences for academic dishonesty may be imposed by the course instructor. Such consequences may include but cannot exceed a grade of “F” in the course. The instructor should attempt to notify the student of the suspected academic dishonesty and give the student an opportunity to respond. The notice and the opportunity may be informal and need not be in writing. Penalties for any disciplinary infraction must be judicially imposed. [See 1640.02.C-5] [rev. 7-98]
9. Instructors may report incidents of academic dishonesty to the dean of students. Upon receiving such a report, the dean of students shall provide the student with written notice that a report has been made and an opportunity to meet with the dean to discuss the report. The dean of students shall maintain the report and any record of the meeting for a period of time deemed appropriate by the dean. The dean of students may file a complaint against the student after the meeting has taken place or the student has elected, either affirmatively or through inaction, not to meet with the dean. [add. 7-98]

**UI Emergency and Safety Procedure:** Please access [http://www.uidaho.edu/emergencymanagement/](http://www.uidaho.edu/emergencymanagement/) to be aware of UI's latest emergency and safety information.

**WSU Campus Safety Plan:** Can be found at [http://safetyplan.wsu.edu](http://safetyplan.wsu.edu) and contains a comprehensive listing of University policies, procedures, statistics, and information relating to campus safety, emergency management, and the health and welfare of the campus community. All faculty, staff, and students are encouraged to visit this web site as well as the University emergency management web site at [http://oem.wsu.edu/Emergencies](http://oem.wsu.edu/Emergencies) to become familiar with the campus safety and emergency information provided. Also, be familiar with the WSU ALERT site ([http://alert.wsu.edu](http://alert.wsu.edu)).
Schmidtlein, Barb

From: Anderson, Jodi Luree
Sent: Wednesday, November 23, 2011 2:31 PM
To: Devine, Lisa
Cc: Schmidtlein, Barb
Subject: RE: FS 538 revised syllabus

Great – the two missing sections (WSU Safety Statement and an Attendance Policy) are now added to the revised FS 538 course syllabus. Thanks for catching this.

Jodi Anderson
Academic Coordinator, School of Food Science
Washington State University
POB 646376 / FSHN Bldg rm 106
Pullman, WA 99163-6376
PH: 509 335-4763 // FAX: 509 335-4815
www.sfs.wsu.edu // jlanderson@wsu.edu
GO COUGS!

From: Schmidtlein, Barb
Sent: Wednesday, November 23, 2011 1:14 PM
To: Anderson, Jodi Luree
Subject: FS 538 needs revised syllabus RE: coop listings for FS 250, 255, 520, and 538

Hi Jodi,

I just reviewed the syllabus for FS 538 and noticed there was not a WSU Safety Statement, or an Attendance Policy included in it. Would you send a revised syllabus that includes the missing items electronically to Lisa Devine, chair of the Catalog Subcommittee, please? Once this is received, then the review of this new course can proceed forward. Much appreciated. BTW, I went ahead and put this item on the agenda for future review and sent to the committee what we had. Thanks,

B.

From: Anderson, Jodi Luree
Sent: Wednesday, November 16, 2011 11:26 AM
To: Schmidtlein, Barb
Subject: RE: coop listings for FS 250, 255, 520, and 538

Barb – in response to our discussion, please disregard my previous email about coop listings.

Leave the cooperative listing for FS 250 and 255 as ‘taught at UI’ and do not change it to ‘jointly taught’. These classes ate UI owned and will never be taught over here at WSU since WSU already has a Gen Micro class.

FS 520 leave as ‘taught at UI’ and do not change it to ‘jointly taught’.

FS 538 – may be taught between both campuses so we’ll change to ‘taught jointly’ and I’ll send you 8 more copies of the packet.

Thank you very much for your time to this matter.
From: Schmidtlein, Barb  
Sent: Tuesday, November 15, 2011 2:35 PM  
To: Anderson, Jodi Luree  
Subject: RE: FS 538 prereqs  
Importance: High

Jodi,

I have some concerns now that this is being listed as a “jointly taught” course. As a UI owned course for which we are providing a WSU coop course listing, a course does not need to be reviewed by the Catalog Subcommittee and can go straight to a bulletin for the AAC and the Faculty Senate. However, if the course is jointly taught, meaning WSU has ownership in the new course, then it must go through the same reviews as any WSU new course.

We received 4 course curricular change forms from Food Science when this came in, all for new UI taught/owned courses where we were providing a WSU coop course listing. Were any of the other courses also jointly taught instead of UI owned? Let me know as soon as possible. I may need to change a bulletin that just went out.

FS 520  
FS 538  
FS 250  
FS 255

(FS 250 & 255 went out on a bulletin for AAC and Faculty Senate today).

Also,

For any courses that are jointly taught, Food Science will need to provide the usual 10 copies of the curricular change documents for the Catalog Subcommittee.

Sincerely,

Barb Schmidtlein  
Catalog Assistant  
Office of the Registrar  
Washington State University  
PO Box 641035  
Pullman, WA 99164-1035  
Phone: 509-335-5583  
Fax: 509-335-7823

Assistant for Catalog Subcommittee, Online and zzusis Catalog Production, and UCORE Workflow;  
Also assist with Registrar.mailbox; Course Descriptions; Oracle Document Imaging;  
Official Statements; and National Student Clearinghouse Degree Verifications.
Important: This communication may contain privileged, non-public or other confidential information. If you have received it in error, please advise the sender by reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.

From: Anderson, Jodi Luree  
Sent: Tuesday, November 15, 2011 1:21 PM  
To: Schmidtlein, Barb  
Subject: RE: FS 538 prereqs

Barb – thanks for catching this. Can you make a change for me on this class? I was supposed to mark the box ‘taught jointly’ instead of ‘taught at UI’. Since we became a school almost all the classes are supposed to be listed as taught jointly, so if it’s okay, can you make this change? Since this is coop at UI, they also have it listed as ‘taught jointly’.

Jodi Anderson  
Academic Coordinator, School of Food Science  
Washington State University  
P.O.B 646376 / FSHN Bldg rm 106  
Pullman, WA 99163-6376  
PH: 509 335-4763 // FAX: 509 335-4815  
www.sfs.wsu.edu // janderson@wsu.edu  
GO COUGS!

From: Schmidtlein, Barb  
Sent: Monday, November 14, 2011 3:04 PM  
To: Nindo, Caleb; Anderson, Jodi Luree  
Subject: RE: FS 538 prereqs

Hi,

Just wanted to let you know that the phrase “or by instructor permission” is no longer being used in the prerequisite statement as that is a “given”. It is assumed the instructor can give permission to someone to enroll in their class. Therefore, in the new zzusis system catalog it won’t be used. The only time you will see the “instructor permission” phrase used is if ‘instructor permission’ is required to enroll in a course.

As to the other, I have put the Recommended preparation: FS 432, 460, MATH 140, and 315 phrase in the description.

Sincerely,

Barb Schmidtlein

From: Nindo, Caleb [mailto:cnindo@uidaho.edu]  
Sent: Thursday, November 10, 2011 4:53 PM  
To: Anderson, Jodi Luree; Schmidtlein, Barb  
Subject: RE: FS 538 prereqs

Hi Jodi & Barb,

I am OK with that statement. The “instructor permission” is good to add because there might be cases where an override is necessary for certain students who have other qualifications that can allow them to take the class.

Thanks  
Caleb
Barb – thank you for catching this. Since that’s the WSU policy for prereq’s, then I like your suggestion “Recommended preparation: FS 432, 460, MATH 140, and 315”, or permission. (can it say or permission?) I’m copying this to Dr. Caleb Nindo and I think he’ll be fine with your recommendation.

Jodi Anderson
Academic Coordinator, School of Food Science
Washington State University
POE 646376 / FSHN Bldg rm 106
Pullman, WA 99163-6376
PH: 509 335-4763 // FAX: 509 335-4815
www.sfs.wsu.edu // jilanderson@wsu.edu
GO COUGS!

Hi Jodi,

I was entering FS 538 into the log for Catalog Subcommittee and noticed that the prerequisites for this course are undergraduate courses. Since undergraduate courses cannot be used as prerequisites for graduate level courses, this course currently does not have any prerequisites listed for it now.

The course does have this statement in the description: “Recommended preparation: MATH 140”. This phrase can be expanded to say “Recommended preparation: FS 432, 460, MATH 140, and 315”, if the department wants.

Let me know what the department would like to do.

Sincerely,

Barb Schmidtlein
Catalog Assistant
Office of the Registrar
Washington State University
PO Box 641035
Pullman, WA 99164-1035
Phone: 509-335-5583
Fax: 509-335-7823

Assistant for Catalog Subcommittee, Online and zzusis Catalog Production, and UCORE Workflow;
Also assist with Registrar.mailbox; Course Descriptions; Oracle Document Imaging;
Official Statements; and National Student Clearinghouse Degree Verifications.
Important: This communication may contain privileged, non-public or other confidential information. If you have received it in error, please advise the sender by reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.
Barb—thank you so much. Let me know if you need anything else.

Jodi Anderson
Academic Coordinator, School of Food Science
Washington State University
POB 646376 / FSHN Bldg rm 106
Pullman, WA 99163-6376
PH: 509 335-4763 // FAX: 509 335-4815
www.sfs.wsu.edu // jal@wsu.edu
GO COUGS!
Washington State University
MAJOR CURRICULAR CHANGE FORM - - COURSE
(Submit original signed form and ten copies to the Registrar's Office, zip 1035.)

Future Effective Date: 08/01/2012
(effective date cannot be retroactive)

☐ New course ☐ Temporary course ☐ Drop service course
☐ There is a course fee associated with this course (see instructions)

☐ Variable credit ____________________________
☐ Increase credit (former credit ______)
☐ Number (former number ______)
☐ Crosslisting (between WSU departments) (Must have both departmental signatures)

☐ Repeat credit (cumulative maximum _______ hours)
☐ Lecture-lab ratio (former ratio __________________)
☐ Prefix (former prefix ______) 
☑ Cooperative listing (UI prefix and number FS 538) taught by: WSU [ ] UI [ ] jointly taught [ ]
☐ S, F grading

☐ Conjoint listing (400/500)
☐ Request to meet Writing in the Major (M) requirement (Must have All-University Writing Committee Approval)
☐ Request to meet GER in ____________________ (Must have GenEd Committee Approval)
☐ Professional course (Pharmacy & Vet Med only) ☐ Graduate credit (professional programs only)
☐ Other (please list request) ______________________

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<th>FS</th>
<th>course prefix</th>
<th>538</th>
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<td>Introduction to Physical Properties of Foods</td>
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FS 432; FS 460; Math 315 or Permission. Recommended Math 140; prerequisite

Description (20 words or less) Thermophysical behavior of foods and biopolymers, including water transport/activity, rheological, thermal, dielectric, and barrier properties. Newtonian and non-Newtonian flow; Viscous, viscoelastic, and Hookean behavior. Relationship between rheology of food biopolymers and structure, composition, temperature, and plasticizer content.

Instructor: Dr. Caleb Nindo
Contact: Jodi Anderson
Campus Zip Code: 6376
Phone number: (208) 885-9683
Email: cnindo@uidaho.edu
Phone number: 335-4763
Email: jlanderson@wsu.edu

- Please attach rationale for your request, a current and complete syllabus, and explain how this impacts other units in Pullman and other branches (if applicable).
- Secure all required signatures and provide 10 copies to the Registrar's Office.

Chair/date: 10-25-1
Dean/date: 11-3-1
General Education Com/date:

Chair (if crosslisted/interdisciplinary)*
Dean (if crosslisted/interdisciplinary)*
Graduate Studies Com/date

All-University Writing Com/date
Academic Affairs Com/date
Senate/date

*If the proposed change impacts or involves collaboration with other units, use the additional signature lines provided for each impacted unit and college.
Rationale for this request – FS 538 Introduction to Physical Properties of Foods

As the School of Food Science, we cooperatively list the classes that are offered on the UI campus so they can be offered to the WSU students. This course does not impact the teaching load of a WSU Faculty, nor does it impact any other WSU unit since this material is not currently available at WSU.

Historically, this course has been offered to Food Science students as a special topics course. This course has been updated to meet current industry standards. This course is part of the FS curriculum for graduate level students as recommended by the SFS graduate curriculum committee. This course will not increase the instructor’s workload. To maintain strong enrollment, this course will be offered in the spring semester, in alternative years.
UNIVERSITY OF IDAHO
COOPERATIVE-COURSE ACTION FORM

Instructions: Complete this form fully. Receive the first four approval signatures listed at the bottom. E-mail the completed form to the Academic Publications Editor (Charles Tibbles) in the Registrar's Office, ctibbles@uidaho.edu.

Effective Term: If approved, requests submitted to the Catalog Editor by October 15, 2010 will be effective Summer 2011 and will appear in the 2011-2012 General Catalog.

<table>
<thead>
<tr>
<th>DEPT/COLLEGE SUBMITTING ACTION FORM</th>
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<tr>
<td>Contact person submitting request</td>
</tr>
<tr>
<td>Gayle Gleason</td>
</tr>
<tr>
<td>Phone Number</td>
</tr>
<tr>
<td>208-885-0707</td>
</tr>
<tr>
<td>E-Mail Address</td>
</tr>
<tr>
<td><a href="mailto:ggleason@uidaho.edu">ggleason@uidaho.edu</a></td>
</tr>
<tr>
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<th>COOPERATIVE-COURSE INFORMATION</th>
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<td>WSU or LCSC course information:</td>
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<td>Drop a course</td>
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<th>If change, what type (check all that apply)</th>
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<th>Change UI Course To (new course information)</th>
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* Specify prefix:
"ID" – course taught at the UI only
"LC" – course taught at LCSC only
"WS" – course taught at WSU only
"ID&LC" – course taught at both UI and LCSC
"ID&WS" – course taught at both UI and WSU
Rationale:
Historically, this course has been offered to Food Science students as a special topics course. The course has been updated to include current industry standards. This course is part of the FS curriculum for graduate level students as recommended by the SFS graduate curriculum committee and by IFT (Institute of Food Technologists) standards. This course will not increase the instructor's workload. To maintain strong enrollment, this course will be offered in the Spring semester only, in alternate years.

<table>
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<tr>
<th>Levels of Approval</th>
<th>Date Approved</th>
<th>Date Denied</th>
<th>Authorized Signature</th>
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<tbody>
<tr>
<td>UI Departmental Administrator</td>
<td></td>
<td></td>
<td>Barry G Swanson</td>
</tr>
<tr>
<td>LCSC or WSU Departmental Administrator *</td>
<td></td>
<td></td>
<td>Barry G Swanson</td>
</tr>
<tr>
<td>UI College Dean</td>
<td></td>
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<tr>
<td>UI Provost</td>
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* Signature indicates agreement with the proposal and assurance that the appropriate changes will be started through WSU curricular channels. In lieu of a signature, you may attach a copy of an e-mail from LCSC or WSU approving this change.

For Registrar's Use Only

<table>
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<tr>
<th>Date Received from College</th>
<th>UCC Agenda Item Number</th>
<th>UCC approval date</th>
<th>Gen. Curriculum Report Number</th>
<th>Regent's approval date</th>
<th>Processed in Catalog</th>
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FS 538: Introduction to Physical Properties of Foods
Spring Semester
(2 credits)

Instructor: Dr. Caleb Nindo
School of Food Science, Agr. Sci. Bldg. 119
University of Idaho
Ph: (208)-885-9683; E-mail: cnindo@uidaho.edu

Class Hours:
3:30-4:30 T, Th

Office Hours: After the class

Textbook:
Rheological methods in food process engineering. By Jim Steffe
(Available Online: www.egr.msu.edu/~steffe/)

Other Reference Texts:
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Engineering Properties of Foods. By Rao, Rizvi and Datta, Taylor & Francis

Catalog Description:
Thermophysical behavior of foods and biopolymers, including water transport/activity, rheological, thermal, dielectric, and barrier properties. Newtonian and non-Newtonian flow; Viscous, viscoelastic, and Hookean behavior. Relationship between rheology of food biopolymers and structure, composition, temperature, and plasticizer content. Recommended preparation one undergraduate course in calculus. Pre-req: FS 432, FS 460, Math 310 Or Permission.

Course Objectives:
To learn the thermophysical properties of food and related biomaterials and their applications in processing, handling, and storage. To characterize both solid and liquid foods using rheological and thermal analysis techniques.

Learning Outcomes:
The students will understand the science and engineering concepts for characterizing the thermophysical behavior of foods and related biomaterials. Students will know the basic principles needed to select and operate rheological and thermal analysis instruments, design rheological experiments and interpret the data.

Grading and Grade Distribution:
Homework: 30%  Mid-Term Exam: 35%  Final Exam: 35%

WSU:
100-94=A, 93-90=A-, 89-87=B+, 86-83=B, 82-80=B-, 79-77=C+, 76-73=C, 72-70=C-, 69-67=D+, 66-60=D, <60=F

UI:
100-90=A, 89-80=B, 79-70=C, 69-60=D, <60=F

Campus Resources:  UI Library; WSU Library; UI Writing Center; WSU Writing Center

Academic Etiquette: Do not carry on side conversations or read the newspaper during class. Please turn off cellular phones during class.

Disability Support Services Reasonable Accommodations Statement:
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Plagiarism statement and link to UI and WSU academic integrity statements:
Academic Dishonesty: Cases of academic dishonesty shall be processed in accordance with the Academic Integrity Policy. See the University of Idaho’s Dean of Students website: (http://www.students.uidaho.edu/default.aspx?pid=56186) and respective universities’ Student Handbooks, Faculty Manuals, and Office of Student Affairs.

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(b) Intentional: the use of other 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 avoid 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 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:

(i) Paraphrase: re wording information in which you accurately present the main ideas from the source but do so using your own organization, words, and sentence structures.

(ii) Summary: a concise statement of the main idea from a section within a source.

(iii) Direct quotation: use of quotes surrounding the passage written by another author.

In general, paraphrasing (i) and the use of summary statements (ii) are very common techniques used in scientific writing. Use of quotations (iii) 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, a grade of “zero” will be given for the exercise. Additional penalties for plagiarism are possible as outlined by the UI Dean of Students (http://www.students.uidaho.edu/default.aspx?pid=56186) and WSU Student Handbook.

Plagiarism and Academic Integrity Addendum:

University of Idaho, Faculty Staff Handbook

Article II--Academic Honesty. [section renumbered 8-07]

1. Cheating on classroom or outside assignments, examinations, or tests is a violation of this code.

2. Plagiarism, falsification of academic records, and the acquisition or use of test materials without faculty authorization are considered forms of academic dishonesty and, as such, are violations of this code.

3. Because academic honesty and integrity are core values at a university, the faculty finds that even one incident of academic dishonesty seriously and critically endangers the essential operation of the university and may merit expulsion. [rev. 7-98]

4. The operation of UI requires the accuracy and protection of its records and documents. To use, make, forge, print, reproduce, copy, alter, remove, or destroy any record, document, or identification used or maintained by UI violates this code when done with intent to defraud or misinform.

5. All data acquired through participation in UI research programs is the property of the university and must be provided to the principal investigator. In addition, collaboration with the University Research Office for the assignment of rights, title, and interest in patentable inventions resulting from the research is also required [see 5400 A through E].

6. Entrance without proper authority into any private office or space of a member of the faculty, staff, or student body is a violation of this code.

7. It is also a violation to hack or make unauthorized use of any computer or information system maintained by the university or a member of the faculty, staff, or student body. [rev.7-05]

8. Instructors and students are responsible for maintaining academic standards and integrity in their classes. Consequences for academic dishonesty may be imposed by the course instructor. Such consequences may include but cannot exceed a grade of “F” in the course. The instructor should attempt to notify the student of the suspected academic dishonesty and give the student an opportunity to respond. The notice and the opportunity may be informal and need not be in writing. Penalties for any disciplinary infraction must be judicially imposed. [See 1640.02 C-5] [rev. 7-98]

9. Instructors may report incidents of academic dishonesty to the dean of students. Upon receiving such a report, the dean of students shall provide the student with written notice that a report has been made and an opportunity to meet with the dean to discuss the report. The dean of students shall maintain the report and any record of the meeting for a period of time deemed appropriate by the dean. The dean of students may file a complaint against the student after the meeting has taken place or the student has elected, either affirmatively or through inaction, not to meet with the dean. [add. 7-98]

UI Emergency and Safety Procedure: Please access http://www.uidaho.edu/emergencymanagement/ to be aware of UI’s latest emergency and safety information.
Great – the two missing sections (WSU Safety Statement and an Attendance Policy) are now added to the revised FS 538 course syllabus. Thanks for catching this.

Jodi Anderson
Academic Coordinator, School of Food Science
Washington State University
POB 646376 / FSHN Bldg rm 106
Pullman, WA 99163-6376
PH: 509 335-4763 // FAX: 509 335-4815
www.sfs.wsu.edu // jlanderson@wsu.edu
GO COUGS!

From: Schmidtlein, Barb
Sent: Wednesday, November 23, 2011 1:14 PM
To: Anderson, Jodi Luree
Subject: FS 538 needs revised syllabus RE: coop listings for FS 250,255, 520, and 538

Hi Jodi,

I just reviewed the syllabus for FS 538 and noticed there was not a WSU Safety Statement, or an Attendance Policy included in it. Would you send a revised syllabus that includes the missing items electronically to Lisa Devine, chair of the Catalog Subcommittee, please? Once this is received, then the review of this new course can proceed forward. Much appreciated. BTW, I went ahead and put this item on the agenda for future review and sent to the committee what we had. Thanks,

B.

From: Anderson, Jodi Luree
Sent: Wednesday, November 16, 2011 11:26 AM
To: Schmidtlein, Barb
Subject: RE: coop listings for FS 250,255, 520, and 538

Barb – in response to our discussion, please disregard my previous email about coop listings.

Leave the cooperative listing for FS 250 and 255 as ‘taught at UI’ and do not change it to ‘jointly taught’. These classes are UI owned and will never be taught over here at WSU since WSU already has a Gen Micro class.

FS 520 leave as ‘taught at UI’ and do not change it to ‘jointly taught’.

FS 538 – may be taught between both campuses so we’ll change to ‘taught jointly’ and I’ll send you 8 more copies of the packet.

Thank you very much for your time to this matter.
From: Schmidtlein, Barb  
Sent: Tuesday, November 15, 2011 2:35 PM  
To: Anderson, Jodi Luree  
Subject: RE: FS 538 prereqs  
Importance: High

Jodi,

I have some concerns now that this is being listed as a "jointly taught" course. As a UI owned course for which we are providing a WSU coop course listing, a course does not need to be reviewed by the Catalog Subcommittee and can go straight to a bulletin for the AAC and the Faculty Senate. However, if the course is jointly taught, meaning WSU has ownership in the new course, then it must go through the same reviews as any WSU new course.

We received 4 course curricular change forms from Food Science when this came in, all for new UI taught/owned courses where we were providing a WSU coop course listing. Were any of the other courses also jointly taught instead of UI owned? Let me know as soon as possible. I may need to change a bulletin that just went out.

FS 520  
FS 538  
FS 250  
FS 255

(FS 250 & 255 went out on a bulletin for AAC and Faculty Senate today).

Also,

For any courses that are jointly taught, Food Science will need to provide the usual 10 copies of the curricular change documents for the Catalog Subcommittee.

Sincerely,

Barb Schmidtlein  
Catalog Assistant  
Office of the Registrar  
Washington State University  
PO Box 641035  
Pullman, WA 99164-1035  
Phone: 509-335-5583  
Fax: 509-335-7823

Assistant for Catalog Subcommittee, Online and zzusis Catalog Production, and UCORE Workflow;  
Also assist with Registrar.mailbox; Course Descriptions; Oracle Document Imaging;  
Official Statements; and National Student Clearinghouse Degree Verifications.
Important: This communication may contain privileged, non-public or other confidential information. If you have received it in error, please advise the sender by reply email and immediately delete the message and any attachments without copying or disclosing the contents. Thank you.

From: Anderson, Jodi Luree  
Sent: Tuesday, November 15, 2011 1:21 PM  
To: Schmidtlein, Barb  
Subject: RE: FS 538 prereqs

Barb – thanks for catching this. Can you make a change for me on this class? I was supposed to mark the box ‘taught jointly’ instead of ‘taught at UI’. Since we became a school almost all the classes are supposed to be listed as taught jointly, so if it’s okay, can you make this change? Since this is coop at UI, they also have it listed as ‘taught jointly’.

Jodi Anderson  
Academic Coordinator, School of Food Science  
Washington State University  
POB 646376 / FSHN Bldg rm 106  
Pullman, WA 99163-6376  
Ph: 509 335-4763 // FAX: 509 335-4815  
www.sfs.wsu.edu // jllanderson@wsu.edu  
GO COUGS!

From: Schmidtlein, Barb  
Sent: Monday, November 14, 2011 3:04 PM  
To: Nindo, Caleb; Anderson, Jodi Luree  
Subject: RE: FS 538 prereqs

Hi,

Just wanted to let you know that the phrase “or by instructor permission” is no longer being used in the prerequisite statement as that is a “given”. It is assumed the instructor can give permission to someone to enroll in their class. Therefore, in the new zzusis system catalog it won’t be used. The only time you will see the “instructor permission” phrase used is if ‘instructor permission’ is required to enroll in a course.

As to the other, I have put the recommended preparation: FS 432, 460, MATH 140, and 315 phrase in the description.

Sincerely,

Barb Schmidtlein

From: Nindo, Caleb [mailto:cnindo@uidaho.edu]  
Sent: Thursday, November 10, 2011 4:53 PM  
To: Anderson, Jodi Luree; Schmidtlein, Barb  
Subject: RE: FS 538 prereqs

Hi Jodi & Barb,

I am OK with that statement. The “instructor permission” is good to add because there might be cases where an override is necessary for certain students who have other qualifications that can allow them to take the class.

Thanks
Caleb
Barb – thank you for catching this. Since that’s the WSU policy for prereq’s, then I like your suggestion “Recommended preparation: FS 432, 460, MATH 140, and 315”, or permission. (can it say or permission?) I’m copying this to Dr. Caleb Nindo and I think he’ll be fine with your recommendation.

Jodi Anderson
Academic Coordinator, School of Food Science
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GO COUGS!

Hi Jodi,

I was entering FS 538 into the log for Catalog Subcommittee and noticed that the prerequisites for this course are undergraduate courses. Since undergraduate courses cannot be used as prerequisites for graduate level courses, this course currently does not have any prerequisites listed for it now.

The course does have this statement in the description: “Recommended preparation: MATH 140”. This phrase can be expanded to say “Recommended preparation: FS 432, 460, MATH 140, and 315”, if the department wants.

Let me know what the department would like to do.

Sincerely,

Barb Schmidtlein
Catalog Assistant
Office of the Registrar
Washington State University
PO Box 641035
Pullman, WA 99164-1035
Phone: 509-335-5583
Fax: 509-335-7823

Assistant for Catalog Subcommittee, Online and zzusis Catalog Production, and UCORE Workflow;
Also assist with Registrar.mailbox; Course Descriptions; Oracle Document Imaging;
Official Statements; and National Student Clearinghouse Degree Verifications.
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FS 538: Introduction to Physical Properties of Foods  
Spring Semester  
(2 credits)

Instructor: Dr. Caleb Nindo  
School of Food Science, Agr. Sci. Bldg. 119  
University of Idaho  
Ph: (208)-885-9683; E-mail: cnindo@uidaho.edu

Class Hours: 3:30-4:30 T, Th

Office Hours: After the class

Textbook:  
Rheological methods in food process engineering. By Jim Steffe  
(Available Online: www.egr.msu.edu/~steffe/)

Other Reference Texts:  
Food Physics. By Ludger Figura and Arthur Teixeira; Springer  
Engineering Properties of Foods. By Rao, Rizvi and Datta, Taylor & Francis

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**Attendance policy:**

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