Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 09/04/15 8:32 am

Viewing: **FS HN 477X : Fundamentals of Packaging**

Last edit: 10/21/15 4:25 pm

Last edited by: cvschwab

Changes proposed by: cchulse

---

Department: Food Science and Human Nutrition (FS HN)
Catalog Year: 2015-2016
First Expected Offering Term: Spring
Instructor: Keith Vorst
Title: Fundamentals of Packaging
Transcript Title: FOOD PACKAGING

Major Teaching Department: FS HN

Cross Listed Courses
Dual Listed Course: FS HN 577X

Credit Hour Details
Credit Type: Fixed
Credit Hours: 3

Grading Method: A-F

<table>
<thead>
<tr>
<th>Instruction Type</th>
<th>Contact Hours per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory</td>
<td>3</td>
</tr>
</tbody>
</table>

Repeatable?
No

Semesters Offered

In Workflow

1. Registrar pre-check
2. FS HN Curr Chair
3. FS HN Chair
4. H Sci Coordinator
5. AGLS Coordinator
6. Grad Coordinator
7. Scheduling
### Fall

| Prerequisites | Chem 163 or 177, Biol 212, Engl 250, Math 160,165 or 181, PHYS 115 or 111, Stat 101,104 or 105 |

### Description

The study of materials, design, processes, performance and safety of packaging. Applied experiences include: packaging design, fabrication and performance testing for packaged products.

### Graduation Restrictions

<table>
<thead>
<tr>
<th>Meets U.S. Diversity Requirement</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meets International Perspectives Requirement</td>
<td>No</td>
</tr>
</tbody>
</table>

### Syllabus & Supporting Documentation

- Final_Eval_Rubric.xls
- T-Writing Rubric.xls
- FSHN 477_577 dual list.doc
- Syllabus-REV 3 Vorst.doc

### Reason for proposal (programmatic justification, need for course, intended use, etc.)

Packaging is critical to food and non-food product distribution. Virtually every product we use has been packaged in some shape or form. A packaging class provides students with tools that are critical for success in an industry or academic setting. The ability to create and process the food is the first step which is currently being done at ISU. The next step is to get the product to the consumer and maintain all the quality and expectations of the food. This can only be done with proper packaging. This class is a critical part of the Food Science curriculum.

### Course outcomes/objective

**Learning objectives for the course:**

**LO1:** Students will develop a fundamental understanding of packaging materials and sources while applying mathematical and scientific principles to plastics processes (material formulations, calculations, mixing of chemicals, etc.)

Outcomes will be measured through objective testing and lab experiments.

**LO2:** Students will gain an understanding of economic factors pertaining to cost, materials, processes, and products in an international environment.

Outcomes will be measured through objective testing and class project.

### Course content/major topics to be addressed (attach syllabus if required by your college/department)

Syllabus attached. Grading rubrics have also been attached. Dual list form also attached.

### Assessment Plans: Mechanism for Students will be assessed using a grading rubric for the final project and technical writing rubric for all laboratory reports and written assignments. Rubrics have
assessing student mastery of course outcomes/objectives has been attached.

Written exams will also be used for student assessment of learning objectives and outcomes.

Relationship of this course to existing courses in other departments and programs (supporting, overlap, etc.)

No courses exist in Food Packaging or Packaging on the Iowa State University Campus. This fits nicely into the curriculum in many units by providing an application piece to fundamentals of chemistry, physics and math.

Results of consultation with relevant departments and programs

Course reviewer comments

litch (09/09/15 11:30 am): Rollback: Roll back to instructor for edits. Instructor notified via email of edits needed, which include cross listing of course, dual list documentation, pre-requisites, and edits to course syllabi.

cvschwab (10/21/15 4:25 pm): AgLS curriculum committee approved with course with modification that the instruction type be corrected to reflect proper contact hours for 3 credits (lecture 2 and laboratory 3) by deleting the 5 contact hours in combination. Email from Ruth Litchfield 10/12/15 confirmed this correction. The deletion of BIOL 211 as per discussion with instructor at the 10/21/15 College curriculum committee meeting. Emails from Keith Vorst [10/21/15] provided the completed dual listing form to be uploaded. C.V.Schwab made edits, uploaded the document, and approved.

Key: 534