**Course Approval Form**

**Action Requested:** (definitions available at website above)
- [X] Create NEW
- [ ] Inactivate
- [ ] Modify (check all that apply below)
  - [ ] Title (must be 75% similar to original)
  - [ ] Repeat Status
  - [ ] Schedule Type
  - [ ] Prereq/coreq
  - [ ] Restrictions
  - [ ] Grade Mode
  - [ ] Other: ____________________________________________

**College/School:** College of Health and Human Services

**Submitted by:** Margaret Slavin

**Department:** Nutrition and Food Studies

**Ext:** 3-6106

**Email:** melavin@gmu.edu

**Subject Code:** NUTR

**Number:** 570

**Effective Term:** [X] Fall

**Year:** 2015

**Fulfills Mason Core Req?** (undergrad only)
- [ ] Currently fulfills requirement
- [ ] Submission in progress

**Title:**

- [ ] Current
- [ ] New

**Banner** (50 characters max w/ spaces)

**New** Food Science for Nutritionists

**Credits:**

- [X] Fixed → 3

**Repeat Status:**

- [X] Not Repeatable (NR)

**Schedule Type:**

- [X] Lecture (LEC)

**Corequisite(s):**

- NUTR 295 or equivalent

**Restrictions Enforced by System:**

- Major, College, Degree, Program, etc. Include Code(s).

**Equivalencies** (check only as applicable):

- [ ] YES, course is 100% equivalent to
- [ ] YES, course renumbered to or replaces

**Catalog Copy** (Consult University Catalog for models)

**Description** (No more than 50 words, use verb phrases and present tense)

Explores selected topics in food science and technology as relevant to the field of nutrition. Coverage includes various food processing and preservation methods, ingredient functionality, nutrient analysis, sensory analysis, food safety considerations, toxicology, and biotechnology.

- [X] When Offered: (check all that apply) Fall Summer Spring

**Indicate number of contact hours:**

- [ ] Hours of Lecture or Seminar per week: 3

**Notes** (List additional information for the course)

- [ ] Hours of Lab or Studio: 

**Approval Signatures**

- [ ] Department Approval Date 2/11/2016
- [ ] College/School Approval Date 2/11/2016

If this course includes subject matter currently dealt with by any other units, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.

**For Graduate Courses Only**

- [ ] Graduate Council Member
- [ ] Provost's Office
- [ ] Graduate Council Approval Date
NUTR 570: Food Science for Nutritionists

COURSE DESCRIPTION:
Explores selected topics in food science and technology as relevant to the field of nutrition. Coverage includes various food processing and preservation methods, ingredient functionality, nutrient analysis, sensory analysis, food safety considerations, toxicology, and biotechnology.

COURSE OBJECTIVES:
At the completion of this course, students will:
- Explore the broad scope of food science and its impact on the modern food supply.
- Explain the purpose of various food processing methods in food preservation, safety, and nutrition.
- Identify purpose of common food ingredients and additives in processed foods.
- Describe toxicological methods used to determine safe levels of food additives or contaminants.
- Compare the advantages and disadvantages of our modern food science-driven food supply in a nutritional context.

BASIC INFORMATION:

Instructor: TBD
Class Schedule: TBD
Office Hours: TBD
Course website: Blackboard, access from https://mymasonportal.gmu.edu

Prerequisites: NUTR 295 or equivalent.

Credits: 3 credits

Course materials: Selected book chapters and articles on library reserve, video presentations, and online learning modules.

TENTATIVE TOPICAL OUTLINE:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to the disciplines within food science: chemistry, flavor, engineering, meat science, microbiology, sensory</td>
</tr>
<tr>
<td>2</td>
<td>Food processing methodologies: Pasteurization, emulsification, freeze-drying, frying, extrusion.</td>
</tr>
<tr>
<td>3</td>
<td>Nutrient analysis: where does the nutrition label come from?</td>
</tr>
<tr>
<td>4</td>
<td>Food Ingredients/Additives and Functions.</td>
</tr>
<tr>
<td>5</td>
<td>(Field trip to processing plant)</td>
</tr>
</tbody>
</table>
GRADING AND COURSE REQUIREMENTS:

Grades will be based on performance in weekly class discussions, two exams, and a debate.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly class</td>
<td>Each week, one student will lead the class in a discussion of the assigned readings and online learning modules for the week. Points will be assigned for preparedness and depth of thought, both as discussion leader and participant each week. Though attendance is not strictly graded, lack of attendance will surely hurt your ability to participate in discussion.</td>
<td>50 points</td>
</tr>
<tr>
<td>discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exams</td>
<td>Two exams will be given on course materials: a mid-term exam and final. Exams will be primarily short answer.</td>
<td>50 points each (100 points total)</td>
</tr>
<tr>
<td>Debates</td>
<td>Students will be asked to investigate a current topic in food science as it relates to nutrition, and will be paired with opposing topics. Students will write a research paper on the subject, and subsequently be given the opportunity to debate their topic in the classroom.</td>
<td>50 points</td>
</tr>
</tbody>
</table>

COURSE POLICIES

Academic Integrity

The integrity of the University community is affected by the individual choices made by each of us. GMU has an Honor Code with clear guidelines regarding academic integrity. Four fundamental and rather simple principles to follow at all times are that:

(1) all work submitted be your own;
(2) when using the work or ideas of others, including fellow students, give full credit through accurate citations;
(3) engage in debate and discussion with civility and respect for differing ideas, perspectives, and traditions; and,
(4) if you are uncertain about the ground rules on a particular assignment, ask for clarification.

No grade is important enough to justify academic misconduct. Please see the Office for Academic Integrity (http://academicintegrity.gmu.edu) for a full description of the Honor Code and the honor
committee process for those who violate the Code. When in doubt (of any kind), please ask me for guidance and clarification.

Academic Calendar:
Visit [http://registrar.gmu.edu/calendars/](http://registrar.gmu.edu/calendars/) for important information about the academic calendar such as the last day to drop classes.

Accommodations for Disabilities
If you are a student with a disability and you need academic accommodations, please see me and contact the Office for Disability Services (ODS) at 993-2474, [http://ods.gmu.edu](http://ods.gmu.edu). All academic accommodations must be arranged through the ODS.

Electronic Devices
In order to facilitate a comfortable learning environment without distraction, please silence your cell phones, smart phones, pagers, and other electronic devices. Computers and tablets may be used for note-taking during class and discussions.
You may not use your cell phone as a calculator on quizzes. Please bring a separate calculator with you.

External Communication

E-mail
In order to ensure your privacy, emails regarding this class will only be sent to your gmu.edu address. If you do not check it regularly, please forward your gmu.edu email to the address of your choice.

Blackboard
The Blackboard Learning System will be used to deliver documents, presentation slides, and announcements to students. The system is accessible at [https://mymasonportal.gmu.edu](https://mymasonportal.gmu.edu) using your University username and password.

Late Assignment Policy
I will not accept late assignments for this class, except in extenuating circumstances. Please communicate with me as soon as you anticipate the possibility of missing a deadline.

Re-grading of Quizzes or Assignments:
Any request for re-grading of an assignment or exam must be submitted in writing. The whole exam or assignment will be re-graded, not specific answers or sections. Assignments and exams will only be accepted for re-grading within one week of being returned to the student.

University Policies
The University Catalog ([http://catalog.gmu.edu](http://catalog.gmu.edu)) is the central resource for university policies affecting student, faculty, and staff conduct in university academic affairs. Other policies are available at [http://universitypolicy.gmu.edu](http://universitypolicy.gmu.edu). All members of the university community are responsible for knowing and following established policies.

**Campus Resources**
Counseling and Psychological Services (http://caps.gmu.edu) SUB 1, Room 3129. (703) 993-2380. If you or a fellow student are struggling with personal or academic concerns, you may consider visiting Counseling and Psychological Services (CAPS). For enrolled students, CAPS services are free of charge and always confidential.

Student Health Services (http://shs.gmu.edu) SUB 1, Room 2300, (703) 993-2831. All students are eligible to see a health care provider for free, with small fees for lab work, medications, treatments, and supplies, if needed. A Registered Dietitian is available one day each week for consultations.

University Libraries “Ask a Librarian”: http://library.gmu.edu/ask

The University Writing Center (http://writingcenter.gmu.edu) Robinson Hall, Room 114A. (703) 993-1200. The Writing Center offers both in-person and online writing assistance for students, at no cost to students. If English is not your native language, you may consider making an appointment to review your assignments with the Writing Center staff before submitting them for grading. Plan in advance, as there is often a wait for an appointment.