This class is all about you developing an innovative new food product that consumers will beg to buy! First, we'll start with an overview of the processes needed to come up with a great idea and to introduce a new food product into the marketplace. You will be part of a development team whose job is to conceptualize, formulate, produce, and evaluate a new food product. Along the way we'll have guest speakers to inform you about the issues and challenges facing product developers in today's fast-paced food industry.

Instructor: Denise Skonberg, PhD
Food Science & Human Nutrition
104 Hitchner Hall
581-1639
Denise.Skonberg@umit.maine.edu

Office Hours: Thursday 1:00-2:00 or by appointment.

Required Reading: Required reading and other materials will be posted on the Blackboard website. Students are responsible for determining which supplemental materials they should read and research to carry out their product development assignments.

"Our new idea is really big."
**Blackboard:** Students are required to access the Blackboard website for this course, located at https://www.courses.maine.edu/webapps/portal/frameset.jsp. Although no exams will be given online, students will need to access the site to obtain required reading material. The lecture slides will also be posted online. Feel free to download the slides to make note-taking easier, but keep in mind that you are expected to learn all the material discussed in class and covered in lecture, not just the material on the slides.

**Laboratory:** Students will be assigned to a product development team having 4 or 5 members. Each team will be responsible for creating and testing a new food product. The teams should discuss and define the roles of each team member throughout the semester. Course grades will be based both on individual and team performance.

**Course Objectives:**

Students completing this course should be able to ......

- Explain the process of new food product development from concept to commercialization
- Conceptualize a food product to meet a perceived need
- Optimize formulation and/or processing parameters of a product
- Evaluate consumer acceptability of food products and concepts
- Develop a packaging concept for a new food product
- Describe hurdles and pitfalls to developing new products in the "real world"
- Make group presentations of product development progress and results
- **Work effectively as part of a product development team!**

**Guest presentations:**

Speakers have been invited to provide you with an insight to actual product development issues in the food industry. Some of these speakers are traveling many hours to come talk to you, so please make the most of these opportunities!
Student responsibilities during guest seminars

1) 2-member student teams will be assigned to each speaker. For that seminar, the students are responsible for contacting the speaker ahead of time to get biographical material, for introducing the speaker to the class, and sending a thank you note.

2) Students should be engaged, actively participating in seminar. That means asking questions! Each student should be prepared to ask several questions. Prepare questions ahead of time, if necessary.

Participation and peer review:

Participation means:
- Attending class and being on time.
- Being an equal partner in the activities of the group.
- Entering into discussion during lecture and group activities.

Evaluation of class participation will be based on attendance in class (25 points), and contributions to class discussion (25 points). Attendance will be recorded at the beginning of each class period. Students are expected to complete reading assignments prior to arriving in class and be ready to participate in an informed manner. I also expect students to respectfully listen to opinions different from their own. Each student may miss one lecture or be tardy without negatively effecting points. After that, 5 points are deducted for each absence and 2 points for each late arrival. I expect students to attend every lab period, since 14 weeks is very little time to develop a new food product. Missing more than one lab period will result in a significant loss (20 points) of lab participation points.

Several times during the semester, a questionnaire will be distributed to give each student an opportunity to provide feedback on their own participation and that of others in their product development team. In order for the group project to be successful, it is essential that each student contribute equally to the overall effort of the group. Your lab participation points will be based on the average scores you receive from these periodic peer evaluations.
Evaluation

Progress report #1*  50 points
Progress report #2*  50 points
Quizzes (25 pts each)  100 points
Class participation    50 points
Lab participation    50 points
Oral presentation*  100 points
Final written report*  100 points
Total  500 points

* = team grade

Academic integrity:

Academic dishonesty includes cheating, plagiarism and all forms of mis-representation in academic work, and is unacceptable at The University of Maine. As printed in the UMaine undergraduate "Student Handbook," plagiarism (the submission of another's work without appropriate attribution) and cheating are violations of The UMaine Student Conduct Code. An instructor who has probable cause or reason to believe a student has cheated may act upon such evidence.

Contingency Plan:

In the event of disruption of normal classroom activities due to an emergency situation, the format for this course may be modified to enable completion of the course. In that event, you will be provided an addendum to this syllabus that will supersede this version.

ADA statement:

If you wish to request an accommodation for a disability, please contact Ann Smith, Coordinator of Services for Students with Disabilities (Onward Building, 1-2319) as early as possible in the semester.

"Business is lousy. Maybe I should have done more market research first."
**Proposed schedule:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic/Lab</th>
<th>Reading</th>
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<tbody>
<tr>
<td>Aug. 29 - Sept. 2</td>
<td>Course overview; Why develop new products? Lab: overview; ideation; initial screening</td>
<td>RR1</td>
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<tr>
<td>Sept. 5</td>
<td><strong>Labor Day</strong></td>
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<td>Sept. 9</td>
<td>Discussion of new products and trends</td>
<td>RR2</td>
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<tr>
<td>Sept. 12-16</td>
<td>Markets and market research Lab: GAP analysis; product screening; product attributes</td>
<td>RR3</td>
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<tr>
<td>Sept. 19-23</td>
<td>Markets and market research; <strong>Quiz #1 - Sept. 23</strong> Lab: product attractiveness scoring, market research &amp; developing concept statements <em>Bethany Bernier, Mars Petcare - Friday, Sept. 23</em></td>
<td>RR4</td>
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<td>Sept. 26-Sept. 30</td>
<td>Product development stages Lab: initial concept testing <em>Rich Bucsko, Schlotterbeck &amp; Foss - Friday, Sept. 30</em></td>
<td>RR5</td>
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<td>Oct. 3-7</td>
<td>Product development stages Lab: initial product formulations <em>Sara Aldaous, PepsiCo - Friday, Oct. 7th</em></td>
<td>RR6</td>
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<td>Oct. 10</td>
<td><strong>Fall Break</strong></td>
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<td>Oct. 14</td>
<td>Sourcing ingredients; <strong>Progress report #1 due Oct. 14</strong> <em>Mark Corey, Green Mountain Coffee - Friday, Oct. 14th</em></td>
<td>RR7</td>
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<tr>
<td>Oct. 17-21</td>
<td>Packaging and labeling; <strong>Quiz #2 - Oct. 21</strong> Lab: package and label development</td>
<td>RR8</td>
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<tr>
<td>Oct. 24-28</td>
<td>Packaging and labeling Lab: ongoing product development <em>Cal Hancock, Hancock Gourmet Lobster Co - Friday, Oct. 28th</em></td>
<td>RR9</td>
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<tr>
<td>Oct. 31-Nov. 4</td>
<td>Process flow and manufacturing Lab: testing packaging concept <em>Shari Baxter, Beam Global Spirits and Wine - Friday, Nov. 4th</em></td>
<td>RR10</td>
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<td>Nov. 7-11</td>
<td>Lab: quality assessment of prototype <strong>Quiz #3 - Friday Nov. 11</strong> <em>Charlie Ferry, Barber Foods - Friday, Nov. 11th</em></td>
<td>RR11</td>
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<tr>
<td>Nov. 14-18</td>
<td>Assessing product quality Lab: consumer sensory evaluation <em>Bruce Stillings, Food &amp; Agriculture Consultants Inc - Nov. 18th</em></td>
<td>RR12</td>
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<td>Nov. 21</td>
<td><strong>Progress report #2 due, Nov. 21st</strong> Lab: product reformulation/optimization</td>
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<td>Nov. 23-25</td>
<td><strong>Thanksgiving Break</strong></td>
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<td>Nov. 28 - Dec. 2</td>
<td>Product launch Lab: process flow; HACCP plan development</td>
<td>RR13</td>
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<tr>
<td>Dec. 5-9</td>
<td><strong>Oral presentations - Friday Dec. 9</strong> Lab: <strong>Quiz #4</strong>, wrap up and report preparation</td>
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<tr>
<td>Dec. 13</td>
<td><strong>Final written report due</strong></td>
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