CONSULTANT RECOMMENDATION REPORT
Planning and Review Committee
Consultant Recommendation

I. Degree: Food Systems and Technology, B.S.

Date of Review: December 17, 2010

Program Director: Carolyn Barnhart

PRC Consultant(s): Charles Baird, Alexander Basyrov

Purpose of the Review: The review was conducted to assess the quality of the B. S. in Food Systems and Technology degree Program as part of the ongoing seven-year review Cycle of every UW-Stout program.

Committee Findings: The PRC recommends continuation of this program through the next scheduled review in 2017-18 and that the recommendations made by the committee be implemented.

II. Abstract: UW-Stout's B. S. in Food Systems and Technology trains students to attain management and professional level positions in the various food-related businesses and industries. The program has 5 concentrations: (1) Food Systems Management, (2) Food Merchandising and Distribution, (3) Food Science, (4) Food Communication, (5) Food Packaging.

III. Process Followed for Current Review:

In the Spring of 2010 the PRC Chair met with the dean, program director and chair of the primary department to discuss the review process. The PRC consultants also met with the program director to review the procedures and offer assistance. Data regarding several aspects of the program were collected from students, key instructors within and outside the department, program committee members and program graduates through surveys. The data were analyzed and returned to the program directors and PRC members. The program director then completed the self-study report and presented the report to the PRC. The consultants then wrote the recommendation report. This report was forwarded to the dean for his response. The PRC reviewed the dean’s response, approved the recommendation report and forwarded the report to the Faculty Senate.

IV. Previous Review 2003-04:

The previous PRC review of the B.S. in Food Systems and Technology program was conducted during academic year 2003-04. That report was written by Charles Baird and Nancy Schofield. The committee’s recommendations as well as the applicable responses are submitted below.

Previous Recommendations for Program Director and Department Chair, Carolyn Barnhart
1. The program director, along with key instructors in Foods Science, should continue to pursue accreditation for the Foods Science Concentration from the Institute for Food Technologists (IFT). This will enable the program to start an IFT student chapter and make more scholarships available to students. This will also increase other companies interest in funding research projects and in contributing funds to update the equipment.

Response from program director and department chair:

The consultants recommended that we continue to pursue approval from the Institute for Food Technologists (IFT). During July 2003, the program director, Carolyn Barnhart, observed the student chapter competition at IFT and inquired as to how UW-Stout could start a chapter. UW-River Falls and UW-Madison faculty have agreed to assist with the development of a student chapter and have invited UW-Stout to participate in their events. The UW-Stout IFT student chapter will be formed this year and will file for activation with IFT by fall 2005.

The program director will be attending the Food Science Administrators Council Meeting in Washington, D.C. in November to gain information on the IFT approval process for the program.

2010-11 Summation of Consultants: The program is in the process of submitting the application for approval from the Institute for Food Technologists with the goal of completing the submission in the fall semester 2011. The program is in the process of recruiting the fourth tenure-track faculty member with PhD in Food Science. The fourth faculty member is required for IFT approval.

2. The program director should develop specific plans for recruiting a greater number of qualified high school students. The competition sessions at the Science Olympiad in April 2004 seems to be a very positive approach to accomplish this. As other competitions are added – food packaging, for example – this may also increase recruitment of high school students. Perhaps these competitions could also be open to students in Minnesota. Consideration should also given to working more closely with high school counselors who would be able to identify high school students who are outstanding in the math and science areas. As these students are identified, develop some means of contacting the students to inform them of the opportunities this program has to offer.

Response from program director and department chair:

A variety of outreach and recruitment efforts have been initiated by the program director. The program director along with two alumni, a graduate assistant and a Food and Nutrition staff member planned and delivered the first Wisconsin Science Olympiad Competition in Food Science on April 3, 2004 at UW-Madison. The effort was well received and will be included in the 2005 competition and is being considered for the national level competition. In addition the program director has given presentations at numerous meetings and conferences to promote the program to various audiences.

a. A presentation to the Cray Academy targeted K-12 science teachers (July 2004).

b. A presentation was given to the Wisconsin Family and Consumer Science Educators (WFCSE) in Stevens Point (August 2004).

c. A presentation was to the Family and Consumer Educators at UW-Stout (September 2004).
d. Recruited at the Minnesota Career Fair (October 2004).

e. A recruitment CD for the program is being developed.

2010-11 Summation of Consultants: A variety of outreach and recruitment efforts are being initiated and continued by the program, but with a limited success. Program Director continues working on new recruitment strategies with the goal of admitting about 30 new students every year.

3. The program director should continue to take measures to assure that students have ample faculty/staff advisement opportunities.

Response from program director:

With the hire of two new faculty members this fall, advisees were distributed among the foods faculty in the department.

2010-11 Summation of Consultants: The issue was resolved with the work of the Program Director and the faculty in the department.

Previous Recommendations for Dean, John Wesolek

1. The dean should continue to provide resources for the two new positions in the Food Science Concentration.

Response from dean:

The two faculty positions in Food Science were filled this fall with the hiring of Dr. Adam Aboubacar and Dr. Cynthia Rohrer. These two individuals are excellent additions to the faculty and will strengthen the department’s expertise in the Food Science area.

2010-11 Summation of Consultants: With the two new faculty members hired the issue was resolved.

2. The dean should continue to provide resources to maintain a full-time Food Technician to provide training, maintenance and quality investment in the food equipment.

Response from dean:

The full-time Laboratory Technician is recognized for her contributions in supporting student learning by providing training for staff and students, maintenance of laboratory and processing equipment and recommending new equipment purchases. In addition the Laboratory Technician coordinates the ordering and consumable supplies required for the foods labs. This position continues to have our support and is reassessed biannually for continuation based upon programmatic need and budgetary considerations.

2010-11 Summation of Consultants: There is still a need recognized by Program Director for a food science equipment technician.
3. The dean should continue his efforts to acquire the funding to complete the modernization of the three labs that are in need of upgrading and to add new equipment as needed to keep the labs as modern as possible.

**Response from dean:**

Last fall the three lab modernization proposals received from the Food and Nutrition Department were forwarded and supported as the top three initiatives in ranking from the Dean’s Office. As the lab mod proposals were evaluated by the University Space committee, only one of the three projects received funding. The Dean’s Office will work with the department to strengthen the other two proposals for resubmission fill fall. As a result members from the CTEM Packaging area and CHD Food Science have met and will be putting forward a joint proposal for Food Packaging.

**2010-11 Summation of Consultants:** Department applied for lab modernization project funds several times in the past years. Several items of equipment were received or soon will be received.

**V. Current Year (2010-11) Program Review:**

<table>
<thead>
<tr>
<th>Program Strengths</th>
<th>Source</th>
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<tbody>
<tr>
<td>1. Distinctive program with five concentrations: Food Systems Management, Food Merchandising and Distribution, Food Science, Food Communication, Food Packaging</td>
<td>Program Director, Student Surveys, Advisory Board Survey</td>
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<tr>
<td>2. Advisory board for the program. Advisory committee members are leaders in their professions</td>
<td>Program Director</td>
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<td>3. The program is further aligned with Institute for Food Technologists (IFT) approval guidelines</td>
<td>Program Director</td>
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<td>4. New Food Science club was established and recognized by IFT</td>
<td>Program Director</td>
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<td>5. The program is actively fostering leadership skills in students: new food science club, Brewing Craft and Science Association, Phi Upsilon Omicron, program board members give guest lectures or teach classes.</td>
<td>Program Director, Student Surveys</td>
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<td>6. Students work with faculty on research projects, students are involved in research day activities</td>
<td>Program Director, Student Surveys</td>
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<tr>
<td>7. Program Director, Carolyn Barnhart</td>
<td>Student Surveys, Program Advisory Board, Key Faculty in the Department</td>
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<tr>
<td>Issues of Concern</td>
<td>Source</td>
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<td>1. The program does not yet have the Institute for Food Technologists (IFT)</td>
<td>Program Director, Program Advisory Board, Key Faculty inside of the Department</td>
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<td>approval that is contingent on hiring a fourth food science faculty member</td>
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<td>2. Lab remodeling: Room 371 in Heritage Hall needed as a bench top lab for food</td>
<td>Program Director, Key Faculty inside of Department, Student Surveys</td>
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<td>science courses; both Room 248 and 371 in Heritage Hall need a shower for safety</td>
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<td>reasons; Room 132 in Heritage Hall needs an upgrade to an experimental food</td>
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<td>incubator site</td>
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<td>3. Lack of funds for timely lab equipment upgrades and acquisition of new lab</td>
<td>Program Director, Key Faculty inside of Department, Student Surveys</td>
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<td>equipment</td>
<td></td>
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<td>4. Some students feel lack of confidence as to being prepared for their profession (the question with the lowest score on the survey, 3.93 average within the program)</td>
<td>Student Surveys</td>
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<td>5. Ongoing issue with relatively low student enrollment in the program</td>
<td>Program Director, Program Advisory Board, Key Faculty inside of Department</td>
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**Recommendations for the Program Director and the Chair, Carolyn Barnhart**

1. Continue to pursue Institute for Food Technologists (IFT) approval and faculty recruitment efforts (the application to IFT is expected in the fall of 2011)
2. Continue to request funding for lab remodeling and modernization
3. Continue to request internal funding for lab remodeling and modernization; continue to work with industry to secure modern equipment; work with the Dean, Advisory Board and Alumni to develop long-term strategy for upgrades and replacement of laboratory equipment
4. Continue to encourage students to actively participate in the Food Science clubs and other leadership organizations at Stout; continue to encourage students to participate in Science Olympiad activities; continue to work with advisers so that students are encouraged to take on leadership roles
5. Continue to work with Science Olympiad and other competitions as a way to increase the program visibility; monitor the impact of the recognition of Food Science as an option for one of the three sciences for high school graduation; work with high school counselors so that high school students have enough information about Food Science; continue to develop recruiting materials (brochures/videos/etc.)
Recommendations for the Dean of the College of Education, Health and Human Sciences, Mary Hopkins-Best, Dean

1. Regarding issue of concern #1, continue to work with Program Director in pursuing the IFT approval and in faculty requirement efforts
2. Regarding issues of concern #2, and #3, continue to work with Program Director to request funding and to develop long-term strategy for upgrades and replacement of laboratory equipment
3. Regarding issue of concern #5, continue to work with Program Director to provide needed funding for travel and marketing materials