CEHHS Response to PRC Recommendations for the B.S. Food Systems and Technology
February, 2011

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)

Response:

The Institute of Food Technologists (IFT) Approval process requires a formal application following the criteria below as stated in “2011 Resource Guide for Approval and Re-Approval of Food Science Programs.” Education Standards for IFT Approval:

- Organization – The instructional program will be administered by an independent administrative unit, Food and Nutrition Department, at the University of Wisconsin-Stout with a separate identifiable budget to sustain a quality academic program.
- Faculty – Must have a minimum of four (4) faculty members with Food Science degrees. The fields of faculty specialization must be distributed over the sub-disciplines required for the food science courses. In general, courses will be taught by faculty whose graduate training or recent experience has involved specialization in the areas of the courses. Food Science Faculty will provide supervision, teaching, and guiding the program.
- Facilities – Teaching laboratories will have up-to-date and adequate facilities and equipment to conduct the chemical, engineering, processing, and microbiological learning activities in the Food Science program. Pilot-plant facilities will be available to teach principles of unit operations and unit processes involved in Food Science. Library facilities and holdings concerning Food Science need to be adequate to support, encourage, and stimulate independent study and research by both students and faculty.

The program will continue to pursue the IFT Approval for the Food Science area of the program. In addition current recruitment needs are in action for two Food Science faculty members: one Food Science faculty member with a concentration and expertise in biochemistry and one Food Science faculty member with a concentration and expertise in food engineering and food processing.

2. Continue to request funding for lab remodeling and modernization

Response:

In 2011, the Department of Food and Nutrition will continue to seek funding to support the learning objectives related to food chemistry/analysis, food safety and microbiology, food processing and engineering, and applied food science. In 2010, a High Performance Liquid Chromatography (HPLC) unit was purchased. During spring 2011, a protein analyzer and a moisture content analyzer will be purchased.
During 2011, a lab modernization request will be forwarded to equip the Food Science laboratories with up to date equipment to analyze food.

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

Response:

Room 371 Heritage Hall has been designated as a Food Science laboratory, effective spring 2011. Equipment will be requested to support the learning activities and outcomes in this laboratory. The food science faculty has developed a list of equipment needed to advance the learning required in a quality Food Science program. Priorities have been set. In addition, there is a critical need for a Food Science technician to calibrate the equipment and run the baseline data for the learning experiences in the labs. The equipment used to analyze the food also needs consumables to run the needed experiments. The faculty and students are in a position to make a contribution to learning with the daily assistance and care of equipment provided by a technician.

The program director and faculty will work with the Program Advisory Board and the FST Alumni to seek funding for equipment and quality internships needed by the students in the FST program.

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

Response:

The Food Science Club is active under the leadership of Rachel Albin, President. The advisor is Dr. Cynthia Rohrer. The Food Science Club has been recognized by IFT and attends Minnesota and Wisconsin professional meetings. Rachel Albin and Catherine Earp attended the IFT Annual Meeting in Chicago, Illinois in July, 2010. While attending IFT, Rachel Albin participated in the IFT Food Science Club leadership activities. Also attending the national meeting were Dr. Cynthia Rohrer, Dr. Carolyn Barnhart, and Dr. Hans Zoerb. FST students volunteer to judge high school competition events in Wisconsin. Current high school food science related events are: Food Innovation for FCCLA (Family Career & Community Leaders of America) and Food Science (Science Olympiad). Students in FST also are active in campus organizations like Food Systems Professionals, Brewing and Craft Association, Phi Upsilon Omicron, Residence Hall Councils, Choir, Band, Academic Honor Society, Habitat for Humanity, Campus Ministry, Stout Student Association, etc.

An ongoing goal of the faculty is to encourage leadership development activities for the FST students in the Food Science classes, in professional organizations and in the greater
community. The current President (Catherine Earp) and Vice-President (Rachel Albin), Treasurer (Allison Buxrude) and Historian (Samantha Harvey) of Phi Upsilon Omicron are FST students. The current officers of Food Systems and Technology Professionals are all FST students: Co-Presidents-Allison Suchecki and Katherine Anderson, Co-Treasurers Emily Krienke and Amanda Linsmeier. The Brewing Craft Association has Dan Vanevenhaven as the current President with Ryan Verdon serving as first semester President. Leadership development of several FST students is a high priority.

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.)

Response:

During the 2009-2011 the F&N faculty has worked in a Community of Practice (COP) to foster development of Food Science activities in the high school curriculum. During this time, a FCCLA Star Event was added for competition titled, Food Innovations. In addition, the F&N COP has worked on developing food science workshops around the state and a summer 2011 Food Science course for high school teachers. These workshops have evolved because of work by the F&N COP with the Department of Public Instruction. Working together, the state of Wisconsin now has a plan for school districts to approve Food Science as one of the three sciences needed to graduate from high school. UW-Stout hosted the initial Cross Walk Curriculum discussions (March 2010) with the Science teachers and the Family and Consumer Sciences teachers. This working group developed the plan for acceptance by the state superintendent (September 2010) via the State Consultants in Family and Consumer Sciences and Science. The Department of Food and Nutrition plans to continue their leadership and collaboration in these areas. It is the hope of the faculty that increased exposure to Food Science on the high school level will result in a higher recruitment of new students in the FST Program

The FST program completed initial filming for the program marketing plan during December 2010. More pictures and video will be added to complete the marketing product.

The FST website and program information will reflect the accomplishments of the students, faculty and the degree program. Updates are scheduled for 2011. This will assist with recruitment.

**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

Response:

Consistent with the CEHHS Goal to “Pursue Institute of Food Technologist accreditation for the BS Food Systems and Technology,” the Dean will continue to closely monitor efforts toward positioning the program to meet the criteria for accreditation, including a program revision that meets the required curriculum standards. The Program Director will be asked to submit a timeline toward accreditation that includes filling the vacant positions, the program revision, and all steps required by IFT for the self study and review.

An unexpected faculty resignation in January returned the department to the status of having insufficient faculty with specific food science credentials, but we will work on filling that position as soon as possible.

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.

Response:

We have been quite successful in obtaining and providing financial support for upgrades and replacement of the food science and technology laboratory equipment. Over $50,000 in Laboratory Modernization support was received in 2010-2011, $39,193 this year in supplemental Laboratory Modernization support and an additional $14,703 is anticipated for this coming year. Additionally CEHHS funded a renovation of Heritage Hall 371 to return it to a functional food science laboratory this year. CEHHS has invited proposals for purchase of laboratory research equipment yet this year. It’s a constant challenge to keep the laboratories up-to-date and functioning properly and this will continue to be a high priority for CEHHS. At this time there is no flexible FTE within the college that would support hiring a laboratory technician. At such time that the classified position currently used to provide laboratory support becomes available the department is being encouraged to reconsider that position becoming an academic staff laboratory position. In the meantime, a technician from the College of STEM periodically services our laboratories.

3. Regarding issue of concern #5, continue to work with Program Director to provide needed funding for travel and marketing materials

Response:

Enrollment in the BS Food Systems and Technology is an ongoing area of concern so CEHHS is committed to continuous marketing of the program. Money is allocated to each Program Director and some additional support is available at the College level if needed. The Program Director is also encouraged to maximize the marketing potential of the web site and other electronic tools.