For Further Information, Please Contact:

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Application Deadline: June 15, 2010

Course Fee Per Participant:

Registration Fee: $ 250 (non-refundable)
Course Fee*: $3,000

Course fee includes instruction fee, information packages, local transportation, meals, lodging, and emergency health insurance.

*Course fee is non-refundable after July 15, 2010.

Please make check payable to:
Michigan State University

Cooperating Departments

- ***Institute of International Agriculture***
- ***Department of Food Science and Human Nutrition***
- ***Department of Crop Sciences/ Horticulture***
- ***Department of Biosystems & Agricultural Engineering***
- ***School of Packaging***
- ***Michigan Department of Agriculture***
- ***United States Department of Agriculture***

Instruction/Training Programs at MSU

Michigan State University is recognized as a center of excellence in training and capacity building nationally and internationally. The World Technology Access Program (WorldTAP) offers international short courses and internship programs in the following areas::

- *Agroecology, Integrated Pest Management (IPM) and Sustainable Agriculture*
- *Intellectual Property Rights (IPR) and Technology Transfer*
- *Food Safety*
- *Biosafety: Environmental Aspects of Agricultural Biotechnology*
- *Animal Agriculture:: Best Practices in Quality Milk Production and Dairy Value Chain*
- *Molecular Plant Breeding*
- *Agricultural Biotechnology*
- *Biofuels*
- *Science and Technology Communication*

Organized By:

Food Science & Human Nutrition

WorldTAP

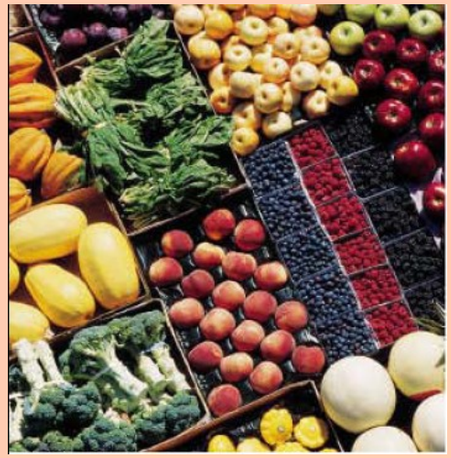
World Technology Access Program (WorldTAP)

http://worldtap.msu.edu/

An International Short Course in:

Food Processing, Packaging, and Value-Addition

August 8-13, 2010



Helping Meet Food and Nutrition Goals of the Global Community

MICHIGAN STATE UNIVERSITY

Course Rationale

The value-added food processing sector is one of the largest manufacturing sectors in developed countries. However, in most developing countries, bulk of food produced is consumed fresh. The lack of value-added food processing operations not only limit marketability and food availability in the off-season but also contribute to significant postharvest losses, at times amounting to as much as 40% or more. In many cases, simple and low-cost processing and packaging technologies can improve the shelf life and storage quality of food considerably. In addition, the use of appropriate technology can also preserve many of the health-promoting compounds, such as phytochemicals including antioxidants.

Value-added operations not only add value to the food but also improve convenience, marketability, and nutritional status of consumers.

The main focus of the course is on plant-based commodities; however, value-added processing of dairy, meat, and poultry will also be covered.

All participants, whether policy makers, planners, or research and extension staff, can equally benefit from this unique training course that covers many aspects of value-added technologies.

Course Description

The program will provide an in-depth introduction to Value-added Processing Technologies. In addition to learning about processing technologies for value-added ventures, participants will also gain knowledge about related topics, such as postharvest technology, product development, sensory evaluation techniques, food packaging, processing and nutritional quality, functional foods, nutraceuticals, and value-added entrepreneurship.

A comprehensive information packet and course materials will be provided to the participants. This will include copies of the lecture notes, key papers, electronic sources and key websites, and hard copy of power point presentations.

Participants will have an opportunity to visit some state of the art research and development facilities in postharvest technology, food science, packaging, and Biosystems and agricultural engineering.

The knowledge, information, and experience gained through this course will help participants contribute toward the planning and development of value-added ventures to enhance food supply and marketability for maximizing revenues of

Course Components

- Good Agricultural Practices (GAPs)
- Postharvest Technology
- Introduction to Value-added Food Processing
- Food Processing/Preservation Technologies:
  - ◊ Fresh-cut or Minimally Processed Foods
  - ◊ Canning Preservation
  - ◊ Dehydration / Drying Technology
  - ◊ Extrusion Processing Technology
  - ◊ Freezing Technology
  - ◊ Aseptic Processing
  - ◊ Innovative/Emerging Technologies
- Quality Control and Assurance
- Product Development Basics
- Sensory Evaluation Techniques
- Food Packaging Fundamentals
- Processing and Nutritional Quality
- Food and Nutrition Extension Education
- Functional Foods and Nutraceuticals
- Food Toxicology and Allergens
- Environmental Hazards and Waste Management
- Value-added Ventures & Entrepreneurship