

## **Area of Specialization Graduate Research Course Options (2019-2020)**

### **Food Chemistry**

- FS 530** Food Ingredient Technology (Spring)
- FS 541** Postharvest Technology of Fruit & Vegetables (Spring)
- FS 550** Food Chemistry (Fall)
- FS 551** Food Analysis (Fall)
- FS 591** Aquatic Products (Fall Odd Years)\*
- FS 591** Food Physical Chemistry (Fall Even Years)\*
- FS/NUTR 609** Food Lipids (Fall Odd Years)
- FS/NUTR 630** Carbohydrates (Fall Odd Years)
- FS 690** Conformation of Polysaccharides (Spring Even Years)\*
- FS 690** Polysaccharide Analysis (Spring Even Years)\*
- FS 690** Sensory Evaluation Techniques (Summer Odd Years)\*
- BCHM 561** Biochemistry (Fall)
- BCHM 562** Biochemistry (Spring)
- BCHM 60501:** Macromolecules (Fall)
- BCHM 620:** Protein Mass Spectrometry and Proteomics (Spring)
- BIOL 51700:** Molecular Biology Proteins (Spring)
- ANSC 62000:** Proteins and Amino Acids in Nutrition (Fall Odd Years)  
(Pre-req. BCHM 562)
- NUTR 534** Human Sensory Systems and Food Evaluation (Spring)

### **Foods for Health**

- FS 552** Nutritional Sciences (Fall)
- FS 591** Functional Foods (Fall Even Years)\*
- FS 690** Phytochem: Biochemistry & Physiology (Spring Even Years)\*
- FS 690** Phytochemicals\*
- ANSC 62000:** Proteins and Amino Acids in Nutrition (Fall Odd Years)  
(Pre-req. BCHM 562)
- NUTR 605** Nutritional Biochemistry & Physiology I
- NUTR 606** Nutritional Biochemistry & Physiology II
- NUTR 607** Nutritional Biochemistry & Physiology III
- NUTR 534** Human Sensory Systems and Sensory Evaluation
- NUTR 640** Human Feeding
- NUTR 616** Special Topics in Ingestive Behavior
- NUTR 590** Journey through the Digestive Tract
- PSY 692** Models of Feeding Behavior

### **Food Microbiology**

- FS 553** Food Microbiology (1 cr) Fall
- FS 564** Food Fermentation (2 cr) Spring (even years)
- FS 565** Microbial Foodborne Pathogens (3 cr) Spring (odd years)
- FS 566** Microbial Techniques (2 cr) Spring (even years)
- FS 591** Food Sanitation (Fall)\*
- FS 660** Intestinal Microbiology Immunology (1 cr) Fall
- BIOL 529** Bacterial Physiology (3 cr) Spring
- BIOL 533** Medical Microbiology (3 cr) Fall

**BIOL 537** Immunobiology (3 cr) Spring  
**BIOL 541** Molecular Genetics of Bacteria (3 cr) Fall  
**BIOL 549** Microbial Ecology (3 cr) Spring  
**BCHM 561** Biochemistry (3 cr) Fall  
**BCHM 562** Biochemistry (3 cr) Spring

**Food Processing**

**FS 506** Grape Wine Prod  
**FS 530** Food Ingredient Technology  
**FS 535** Aseptic Processing Technology  
**FS 554** Food Processing & Packaging  
**FS 691** Advanced Food and Biological Material Characterization Techniques (Kokini)  
**CHE 540** Transport Phenomena  
**CHE620** Transport Phenomena I  
**ABE 307** Momentum Transfer for Food and Bio System  
**ABE 308** Heat And Mass Transfer In Food And Biological Systems  
**ABE 457** Transport Operations In Food And Biological Systems I  
**ABE 557** Transport Operations In Food And Biological Systems II  
**ABE 558** Process Design For Food And Biological System  
**ABE 580** Process Engineering Of Renewable Resources  
**ABE 56000** Biosensors: Applications and Fundamentals  
**ABE 62700** Colloidal Phenomena in Bioprocessing Linear and Non-linear viscoelasticity of biological and food materials

**\*Temporary Course** – Consult instructor for course availability