Recommended Research Area of Specialization Graduate Student Course Options

**Food Chemistry**

ANSC 620 Proteins and Amino Acids in Nutrition (Fall Odd Years)  
(Pre-req. BCHM 562)  
BCHM 561 Biochemistry (Fall)  
BCHM 562 Biochemistry (Spring)  
BCHM 60501 Macromolecules (Fall)  
BCHM 620 Protein Mass Spectrometry and Proteomics (Spring)  
BIOL 517 Molecular Biology Proteins (Spring)  
FS 530 Food Ingredient Technology (Fall)  
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)*  
HORT 541 Postharvest Technology of Fruit & Vegetables (Spring)  
NUTR 534 Human Sensory Systems and Food Evaluation (Spring)

**Foods for Health**

ANSC 620 Proteins and Amino Acids in Nutrition (Fall Odd Years)  
(Pre-req. BCHM 562)  
FS 552 Nutritional Sciences (Fall)  
FS 591 Functional Foods (Fall Even Years)*  
FS 690 Phytochm: Biochemistry & Physiology (Spring Even Years)*  
FS 690 Phytochemicals*  
NUTR 605/ANSC 625 Nutritional Biochemistry & Physiology I  
NUTR 606/ANSC 626 Nutritional Biochemistry & Physiology II  
NUTR 607/ANSC 627 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**

BCHM 561 Biochemistry I (Fall)  
BCHM 562 Biochemistry II (Spring)  
BIOL 529 Bacterial Physiology (Spring)  
BIOL 533 Medical Microbiology (Fall)  
BIOL 537 Immunobiology (Spring)  
BIOL 541 Molecular Genetics of Bacteria (Fall)  
BIOL 549 Microbial Ecology (Spring)
FS 553 Food Microbiology (Fall)
FS 564 Food Fermentation (Spring Even Years)
FS 565 Microbial Foodborne Pathogens (Spring Odd Years)
FS 566 Microbial Techniques (Spring Even Years)
FS 591 Food Sanitation (Fall)*
FS 660 Intestinal Microbiology Immunology (Fall)

Food Processing
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 560/BME 521 Biosensors: Applications and Fundamentals (Spring)
ABE 627 Colloidal Phenomena in Bioprocessing Linear and Non-linear Viscoelasticity of Biological and Food Materials
CHE 540 Transport Phenomena
CHE 620 Transport Phenomena I
FS/HORT 506 Grape Wine Production (Fall)
FS 530 Food Ingredient Technology
FS 535 Aseptic Processing Technology
FS 554 Food Processing & Packaging
FS 691 Advanced Food and Biological Material Characterization Techniques

*Temporary Course – Consult instructor for course availability

**Course list effective 2021-2022