Food Science (PhD)

Degree Requirements

Core Courses

Select nine hours of coursework listed under "Core Courses" approved in conjunction with the academic committee.

Select an additional six hours of coursework listed under either "Core Courses" or "Elective Courses" approved in conjunction with the academic committee.

Supervised Teaching Course

Supervised Teaching Course 2

FS 885 Doctoral Supervised Teaching

Seminar Course

Seminar Course 1

FS 780 Seminar In Food Science

Research Ethics Course

Research Ethics Course 1

"Research Ethics" course will be determined in conjunction with the academic committee.

Additional Courses 53

"Additional Courses" will be determined in conjunction with the academic committee to meet 72 total hours.

Total Hours 72

1 Two semesters of FS 885 Doctoral Supervised Teaching are required.

2 "Additional Courses" may include FS 895 Doctoral Dissertation Research, FS courses, optional minor courses, and/or interdisciplinary courses.

Core Courses

Select courses from at least three categories below:

Chemistry-Biochemistry

FS 567 Sensory Analysis of Foods 3

Engineering

FS 741 Thermal Processing of Foods 3

Microbiology

FS 540 Food Safety and Public Health 3

FS 725 Fermentation Microbiology 3

Nutrition

FS 501 Advanced Nutrition and Metabolism 3

FS 555 Exercise Nutrition 3

NTR 701 Protein and Amino Acid Metabolism 3

NTR 706 Vitamin Metabolism 3

NTR 708 Energy Metabolism 3

NTR 775 Mineral Metabolism 3

Processing Technology

FS 516 Quality Control in Food and Bioprocessing 3

FS 522 Food Packaging 3

FS 530 Post-Harvest Food Safety 3

FS 535 Food Safety Management Systems 3

FS 751 Food Ingredient Technology In Product Development 4

Elective Courses

FS 520 Pre-Harvest Food Safety 3

FS 526 Upstream Biomannufacturing Laboratory 2

FS 550 Food Industry Study Tour 2

FS 554 Lactation, Milk, and Nutrition 3

FS 557 Nutraceuticals and Functional Foods 3

FS 562 Postharvest Physiology 3

FS 580 Professional Development and Ethics in Food Safety 1

Additional courses may be approved in conjunction with the academic committee.

Faculty

Full Professors

Jonathan C. Allen, Professor, Director of Food Science Graduate Program
Kenneth E. Anderson
Rodolphe Barrangou, Todd R. Klaenhammer Distinguished Professor
Frederick Breidt, USDA/ARS Microbiologist and Professor
Benjamin James Chapman
Patricia Ann Curtis
Lisa Louise Dean, USDA Professor
Mary Anne Drake, William Neal Reynolds Distinguished Professor
Mario Giovanni Ferruzzi, David H. Murdock Distinguished Professor
Scott A. Hale
Hosni Moustafa Hassan
Lee-Ann Jaykus
Sophia Kathariou, Professor
Saad A. Khan
Duane K. Larick
Mary Ann Lila, Professor, Food Bioprocessing & Nutrition Sciences and Director, Plants for Human Health Institute
Richard Linton
Muquarrab Qureshi, Research Leader, Food Science Research Unit, Agricultural Research Service, USDA
K. P. Sandeep, Department Head, Professor
John Douglas Sheppard, Professor, Bioprocessing Science Undergraduate Coordinator

## Associate Professors
April Fogleman, Associate Professor and Extension Specialist
Lora Suzanne Goodell, Associate Professor, Director of Interdepartmental Graduate Program in Nutrition
Dana J. Hanson, Associate Professor, Extension Specialist, Meat Science
Gabriel Keith Harris, Associate Professor, Director of Undergraduate Programs for Food Science
Suzanne Dunn Johanningsmeier, Research Food Technologist & USDA Assistant Professor
Colin David Kay, Associate Professor
Slavko Komarnytsky, Associate Professor
Andrew Peter Neilson, Associate Professor
Area of Research: Microbiome
Ilenys Muniz Perez-Diaz, USDA-ARS Associate Professor
Area of Research: Microbiology

Clinton Dale Stevenson, Associate Professor and Distance Education Coordinator

## Assistant Professors
Alexander Vladimirovich Chouljenko, Assistant Professor
Area of Research: Seafood Science
Natalie Kathleen Cooke, Assistant Professor, Director of Undergraduate Programs for Nutrition Science
Lynette Marie Johnston, Assistant Professor and Food Safety Extension Specialist
Marvin Leonel Moncada Reyes, Assistant Professor
Deepti Arvind Salvi, Assistant Professor
Area of Research: Food Engineering
Ondulla Tyvette Toomer, USDA Assistant Professor
Haotian Zheng, Assistant Professor
Area of Research: Food Chemistry

## Practice/Research/Teaching Professors
Josip Simunovic, Research Professor
Fernanda Bottaro de Oliveira Santos
Nicola Singletary, Assistant Teaching Professor

## Emeritus Faculty
Sarah Liberman Ash
Leonard W. Aurand
Hershell R. Ball Jr
Leon Carl Boyd
Roy E. Carawan
Daniel E Carroll Jr
George L. Catignani
Edward Allen Foegeding
David Patrick Green
Max E. Gregory
Victor A. Jones
Todd Robert Klaenhammer
Carolyn Jean Lackey
Tyre C. Lanier
Roger Floyd McFeeters
James Leslie Oblinger
John Eual Rushing
Timothy H. Sanders
Steven J. Schwartz
Brian W. Sheldon
Harold E. Swaisgood
Kenneth R. Swartzel
Van-Den Truong
Lynn G. Turner
William M. Walter
Donn R. Ward

Adjunct Professors
William Ronald Aimutis Jr.
Alejandro Amezquita
Pablo Marcelo Coronel
Christopher R. Daubert
Jack Parker Davis
Brian E. Farkas
Katherine Patterson Maloney
Tawanda Muzhingi
Tawanda Muzhingi
Shengmin Sang
Ratna Rani Sharma
Richard C. Theuer