Division of Animal and Nutritional Science

Programs of Study
The Division is home to programs in Animal & Nutritional Science, Human Nutrition and Foods and Biochemistry. As a student in this division, you may pursue a degree that enables you to do graduate work, go into commercial agriculture, or work for federal or state agencies, the food processing industry, or other areas of food and agriculture. The pre-professional program meets requirements for entry into professional school programs of veterinary and human medicine, allied health professions, and fulfill the requirements for application to an accredited Dietetic Internship. Many pre-professional students obtain their bachelor’s degrees after three years of pre-professional study and one year of professional study.

Courses that you will take in the division depend on a student’s particular program. The Division offers classes in animal production, biochemistry, breeding and genetics, food science, animal and human nutrition, pathology, and physiology. To assist in equipping yourself for one of the many varied careers in animal agriculture, you will take supporting courses in other divisions of the Davis College of Agriculture, Natural Resources, and Design and in other colleges. The programs are flexible and permit you to obtain a broad background and take sufficient courses in one area during the last two years to prepare you for your first postgraduate career choice.

Degrees Offered
• Bachelor of Science in Agriculture
  • Major:
    • Animal and Nutritional Sciences
    • Human Nutrition and Foods
  • Bachelor of Science
  • Majors:
    • Animal and Nutritional Sciences
    • Agricultural Biochemistry
    • Human Nutrition and Foods

Pre-Professional Programs (Veterinary Medicine, Human Medicine, and Allied Health Professions)
The bachelor of science programs in Animal and Nutritional Sciences, Agricultural Biochemistry, and Human Nutrition and Foods are designed to provide students with the academic requirements for entry into professional schools or colleges of veterinary medicine. The West Virginia Higher Education Policy Committee has agreements for positions with the Southern Regional Education Board in the schools of veterinary medicine at Auburn University and Mississippi State University, and with the Virginia-Maryland Regional College of Veterinary Medicine. To qualify for these positions, you must have been a West Virginia resident for at least the past five years at the time of application. Applicants for admission to these colleges of veterinary medicine must have at least seventy-eight semester hours of acceptable credit. Applicants with a grade point average of 3.0 or above will be given first consideration for admission to these institutions. Because a maximum of thirteen eligible students are accepted each year, students are urged to have alternative goals.

Faculty
Interim Director
• Matthew E. Wilson - Ph.D. (Iowa State University)
  Associate Professor - Reproductive Physiology

Professors
• Kenneth P. Blemings - Ph.D. (University of Wisconsin)
  Assistant Director - Academic Programs, Nutritional biochemistry
• Robert A. Dailey - Ph.D. (University of Wisconsin)
  Reproductive physiology
• E. Keith Inskeep - Ph.D. (University of Wisconsin)
  Reproductive physiology
• Jeryl C. Jones - D.V.M., Ph.D. (Auburn University)
  Veterinary radiology
• P. Brett Kenney - Ph.D. (Kansas State University)
  Animal science and meat science.
• Hillar Klandorf - Ph.D. (British Council for National Academic Awards)
Physiology
• Phillip I. Osborne - Ph.D. (Clemson University)
  Extension specialist, Livestock marketing and production

Associate Professors
• Eugene E. Felton - Ph.D. (University of Missouri)
  Ruminant nutrition
• Jacek Jaczynski - Ph.D. (Oregon State University)
  Food safety
• Marlon Knights - Ph.D. (West Virginia University)
  Reproductive physiology and animal production
• K. Marie Krause - Ph.D. (University of Wisconsin)
  Dairy science nutrition
• Kristen E. Matak - Ph.D. (Virginia Tech)
  Food science and human nutrition
• Joseph S. Moritz - Ph.D. (Kansas State University)
  Nutrition and feed manufacture
• Susan Partington - Ph.D., R.D. (University of Wisconsin)
  Human nutrition and foods
• Kenneth J. Semmens - Ph.D. (Auburn University)
  Aquaculture
• Janet C. L. Tou - Ph.D. (University of Toronto)
  Human nutrition and foods
• Jianbo Yao - Ph.D. (McGill University)
  Molecular biology-genetics

Assistant Professors
• Kimberly M. Barnes - Ph.D. (University of Nebraska)
  Animal science-biochemistry
• Scott A. Bowdrige - Ph.D. (Virginia Tech)
  Food animal production, parasite immunology
• Melissa Marra - Ph.D., R.D. (Florida International University)
  Human nutrition and foods
• Joseph W. McFadden - Ph.D. (Virginia Tech)
  Nutritional biochemistry
• Melissa Olfert - Dr.P.H., M.S., R.D. (Loma Linda University)
  Human nutrition and foods

Teaching Assistant Professor
• Megan Govindan - M.P.H., M.S., R.D. (West Virginia University)
  Human nutrition and foods
• Crystal E. Smith - M.Agr., PAS (The Pennsylvania State University)
  Equine management

Clinical Associate Professor
• Margaret A. Minch - D.V.M. (Ohio State University)
  Veterinary medicine

Adjunct Faculty
• Robert L. Cochrane - Ph.D. (University of Wisconsin)
  Reproductive physiology.
• Jesse Fallon - D.V.M. (Virginia Tech)
  Veterinary medicine.
• Ann Hubbs - Ph.D., D.V.M. (Colorado State University, Texas A & M)
  Veterinary medicine.
• Eric K. Johnson - Ph.D. (University of Wisconsin)
  Mechanical and aerospace engineering.
• Barbara Jean Meade - D.V.M., Ph.D., M.D. (West Virginia University)
  Veterinary sciences.
• David D. Moran - Ph.D. (University of Iowa)
  Hydrodynamics and mathematics.
• Kerry S. Odell - Ph.D. (Ohio State University)
  Agricultural education.
• Dale W. Porter - Ph.D. (West Virginia University)
  Toxicology.
• Caird E. Rexroad III - Ph.D. (Texas A&M)
  Genetics.
• George R. Seiler - D.V.M. (University of Florida)
  Veterinary sciences.
• Alfred H. Stiller - Ph.D. (University of Cincinnati)
  Chemistry.
• Richard Z. Woodworth - M.S. (West Virginia University)
  Agriculture.

Faculty Emeriti
• William E. Collins - Ph.D. (University of Wisconsin)
  Reproductive physiology.
• Leslie Dozsa - D.V.M. (College Veterinary Medicine Budapest)
  Veterinary medicine.
• Betty J. Forbes - M.A. (West Virginia University)
  Normal, community, and clinical nutrition.
• Mary K. Head - Ph.D. (Purdue University)
  Human nutrition and foods.
• William H. Hoover - Ph.D. (Penn State University)
  Animal nutrition.
• Paul E. Lewis - Ph.D. (West Virginia University)
  Reproductive physiology.
• M. Zafar Alam Nomani - Ph.D. (Rutgers University)
  Nutrition
• Ronald A. Peterson - Ph.D. (Michigan State University)
  Nutritional physiology of poultry.
• Edward C. Prigge - Ph.D. (University of Maine)
  Animal nutrition.
• Paul M. Smith - M.S. (West Virginia University)
  Dairy foods.
• Wayne R. Wagner - Ph.D. (Colorado State University)
  Extension specialist. Animal breeding and genetics.
• John Warren - Ph.D. (University of Maryland)
  Reproductive physiology.

Food Service Production

Minor Code - U104

The minor in foodservice production is designed to provide students educational opportunities in the areas of hospitality and/or foodservice management and/or food production management. Emphasis is given to those courses that provide expanded knowledge on management, food production, and food safety. Students must obtain a 75% or higher on the ServSafe® Food Safety and Alcohol examinations offered in order to obtain the minor.

A grade of C or higher must be earned in all minor courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARE 440</td>
<td>Futures Market/Commodity Price</td>
<td>3</td>
</tr>
<tr>
<td>FDST 200</td>
<td>Food Science and Technology</td>
<td>3</td>
</tr>
<tr>
<td>FDST 445</td>
<td>Food Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>HN&amp;F 353</td>
<td>Food Service Systems Management</td>
<td>4</td>
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</tbody>
</table>

Choose two of the following: 6
Food Science and Technology

Minor Code - U057

The minor in Food Science and Technology is for students interested in pursuing careers in the food industry. The students will gain knowledge of food processing, engineering, chemistry, microbiology, and marketing. The minor will broaden career opportunities to food safety and quality assurance, food science/technology, food engineering, sensory evaluation, new food marketing research, food development, technical sales and marketing, and state or federal food inspectors.

Minor Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>FDST 200</td>
<td>Food Science and Technology</td>
<td>3</td>
</tr>
<tr>
<td>FDST 308</td>
<td>Food Plant Sanitation</td>
<td>3</td>
</tr>
<tr>
<td>ARE 431</td>
<td>Marketing Agricultural Product</td>
<td>3</td>
</tr>
<tr>
<td>Electives - Select three of the following:</td>
<td>9</td>
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<tr>
<td>AEM 341</td>
<td>General Microbiology</td>
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<tr>
<td>ARE 204</td>
<td>Agribusiness Management</td>
<td></td>
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<tr>
<td>ARE 406</td>
<td>Applied Quantitative Methods</td>
<td></td>
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<tr>
<td>FDST 365</td>
<td>Muscle Foods Technology</td>
<td></td>
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<tr>
<td>FDST 445</td>
<td>Food Microbiology</td>
<td></td>
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<tr>
<td>or AEM 445</td>
<td>Food Microbiology</td>
<td></td>
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<tr>
<td>FDST 491</td>
<td>Professional Field Experience</td>
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<tr>
<td>HN&amp;F 171</td>
<td>Introduction to Nutrition</td>
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<tr>
<td>HN&amp;F 348</td>
<td>Science of Food Preparation</td>
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<tr>
<td>HN&amp;F 350</td>
<td>Cross-Cultural Dietary Pattern</td>
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<tr>
<td>HN&amp;F 353</td>
<td>Food Service Systems Management</td>
<td></td>
</tr>
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</table>

Total Hours 18