# Fall 2025 BIMS Directed Electives By Department

#### **Animal Science**

- ANSC 107: General Animal Science | Credits: 3 credit hours | Lab
   Requirement: No lab required | Class Specification: No restrictions | Availability:
   Fall, Spring, Summer | Prerequisites: None
- ANSC 108: General Animal Science Laboratory | Credits: 1 credit hours | Lab Requirement: 2 Lab Hours | Class Specification: No restrictions | Availability: Fall, Spring, Summer | Prerequisites: Concurrent enrollment in ANSC 107
- ANSC 210: Companion Animal Science | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: No restrictions | Availability: Fall, Spring | Prerequisites: None
- ANSC/NUTR 303: Animal Nutrition | Credits: 3 credit hours | Lab Requirement:
   No lab required | Class Specification: U3 | Availability: Fall, Spring | Prerequisites:
   CHEM 119 and a grade of C or better in ANSC 113, or CHEM 222, CHEM 227 or
   CHEM 257; junior classification or approval of instructor.
- ANSC 318: Animal Feeds and Feeding | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3 | Availability: Fall, Spring, Summer | Prerequisites: Grade of C or better in ANSC 111, ANSC 113, and ANSC 303; junior classification or approval of instructor
- ANSC/FSTC 326: Food Bacteriology | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: Junior or senior classification or approval of instructor. Cross-listed with FSTC 326.

# **Anthropology**

• ANTH 435: Medical Anthropology | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall/Spring on odd years | Prerequisites: Junior or senior classification or approval of instructor.

## **Biochemistry**

BICH 411: Comprehensive Biochemistry II | Credits: 3 credit hours | Lab Requirement:
 1 Lab Hour | Class Specification: None | Availability: Fall/Spring/Summer | Prerequisites:
 Grade of C or better in BICH 410;

- BICH 412: Biochemistry Laboratory I | Credits: 1 credit hour | Lab Requirement: 3 Lab Hours | Class Specification: None | Availability: Fall/Spring/Summer | Prerequisites: BICH 410 or registration therein.
- **BICH 414: Biochemical Techniques I** | Credits: 2 credit hours | Lab Requirement: 6 Lab Hours | Class Specification: U3/U4 | Availability: Spring | Prerequisites: BICH 440, BICH 409, or BICH 410; major in biochemistry, genetics, microbiology, and molecular and cell biology.
- BICH/GENE 431: Molecular Genetics | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: None | Availability: Fall, Spring | Prerequisites: BICH 409, BICH 410, or BICH 440; GENE 301, GENE 302, GENE 303, GENE 320 or BIMS 320. Cross-listed with GENE 431.
- BICH 432/GENE 432 Laboratory in Molecular Genetics | Credits: 2 credit hours | Lab Requirement: 6 Lab Hours | Class Specification: None | Availability: Fall, Spring, Summer | Prerequisites: GENE 301, GENE 302, GENE 303, BIMS 320/GENE 320 or GENE 320/BIMS 320; BICH 431/GENE 431 or GENE 431/BICH 431. Cross-listed with GENE 432/BICH 432.

#### **Biomedical Sciences**

- BIMS 110: One Health in Action | Credits: 1 credit hour | Lab Requirement: No lab required | Class Specification: U1/U2 | Availability: Fall, Spring | Prerequisites: None
- BIMS 125: Animals in Society | Credits: 1 credit hour | Lab Requirement: No lab required | Class Specification: U1/U2 | Availability: Fall, Spring | Prerequisites: None
- BIMS 250: Professionalism, Skill Development, Career Exploration, and Ethical Conduct in BIMS | Credits: 1 Credit Hour | Lab Requirement: None | Class Specification: None | Availability: TBD | Prerequisites: None
  - For Catalog Years Prior to 2025
- **BIMS 291: Research** | Credits: 1 to 4 credit hours | Lab Requirement: Varies | Class Specification: U1/U2 | Availability: Fall, Spring, Summer | Prerequisites: Approval form required before registration
- BIMS 303: Research Methodologies and Experimental Design in Biomedical Sciences | Credits: 3 Credit Hours | Lab Requirement: None | Class Specification: None | Availability: TBD | Prerequisites: CHEM 257 w/Min Grade C
  - For Catalog Years Prior to 2025
- BIMS 380: Equine-Assisted Activities and Therapies: Best Practices | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall/Spring | Prerequisites: None

- BIMS 405/GENE 405 Mammalian Genetics | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Spring | Prerequisites: GENE 301, BIMS 320/GENE 320 or GENE 320/BIMS 320. Cross Listing: GENE 405/BIMS 405.
- BIMS 481: Seminar in Biomedical Science | Credits: 1 credit hour | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: Junior or senior classification; BIMS major; BIOL 401, BIOL 402, BIOL 403, VIBS 310, or VIBS 311.
- BIMS 484: Biomedical Science Field Experience | Credits: 2 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall, Spring, Summer | Prerequisites: Approval form required before registration. Forms on our website here: <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>
- BIMS 485: Directed Studies | Credits: 1 to 4 credit hours | Lab Requirement:
   Varies | Class Specification: U3/U4 | Availability: Fall, Spring, Summer |
   Prerequisites: Approval form required before registration. Forms on our website
   here: <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>
- BIMS 491: Research | Credits: 1 to 4 credit hours | Lab Requirement: Varies |
  Class Specification: U3/U4 | Availability: Fall, Spring, Summer | Prerequisites:
  Grade of C or better in CHEM 228 or CHEM 258; grade of C or better in PHYS 202;
  junior or senior classification; Approval form required before registration. Forms
  on our website here: https://vetmed.tamu.edu/bims/advising/advising-forms/

## **Biology**

- BIOL 213: Molecular Cell Biology | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U1/U2 | Availability: Fall, Spring, Summer | Prerequisites: : BIOL 112 and CHEM 120 (MUST contact BIOL department for any necessary override)
- BIOL 489-501: Biology of Neurodegenerative Diseases | Credits: 1 credit hours |
  Lab Requirement: No lab required | Class Specification: N/A | Availability: Fall
  2025 | Prerequisites: BIOL 213 or GENE 302 or GENE 320/BIMS 320 or NRSC
  277/VIBS277

#### Communication

 COMM 370: Health Communication | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: None

#### **Entomology**

- ENTO 208: Veterinary Entomology | Credits: 2 credit hours | Lab Requirement: Co-requisite with ENTO 209 | Class Specification: U1/U2 | Availability: Fall, Spring | Prerequisites: Co-enrollment in ENTO 209.
- ENTO 209: Veterinary Entomology Laboratory | Credits: 1 credit hour | Lab Requirement: Co-requisite with ENTO 208 | Class Specification: U1/U2 | Availability: Fall, Spring | Prerequisites: Concurrent enrollment with ENTO 208.
- ENTO 210: Global Public Health Entomology | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U1/U2 | Availability: Fall, Spring, Summer | Prerequisites: None
- ENTO 423: Medical Entomology | Credits: 2 credit hours | Lab Requirement: Co-requisite with ENTO 427 | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: BIOL 111; ENTO 427 or concurrent enrollment; junior or senior classification.
- ENTO 427: Medical Entomology Laboratory | Credits: 1 credit hour | Lab Requirement: Co-requisite with ENTO 423 | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: BIOL 111; ENTO 423 or concurrent enrollment; junior or senior classification.
- ENTO/FIVS 431: The Science of Forensic Entomology | Credits: 3 credit hours |
   Lab Requirement: No lab required | Class Specification: U3/U4 | Availability:
   Spring | Prerequisites: None

#### <u>Health</u>

 HLTH 354: Medical Terminology for the Health Professions | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall, Spring, Summer | Prerequisites: Junior or senior classification. Cross-listed with PHLT 354.

#### Marketing

 MKTG 443/PHLT 426: The Business of Healthcare | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: Business and Public Health majors; junior or senior classification; or approval of instructor. Cross-listed with PHLT 426.

#### **Nutrition**

- NUTR 202: Fundamentals of Human Nutrition | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U1/U2 | Availability: Fall, Spring, Summer | Prerequisites: None.
- NUTR 222: Nutrition for Health and Health Care | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U1/U2 | Availability: Fall, Spring (Distance Education only) | Prerequisites: None.

### **Urban Planning**

 URPN 370: Health Systems Planning | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: No restrictions | Availability: Fall, Spring, Summer | Prerequisites: None.

# Veterinary Integrative Bioscience

- VIBS 111: Biodefense, Biosecurity, and Bioterrorism | Credits: 1 credit hour | Lab Requirement: None | Class Specification: U1/U2 | Availability: Fall, Spring | Prerequisites: None
- VIBS 211 Twenty-first Century Biological Threats | Credits: 1 credit hour | Lab Requirement: None | Class Specification: U1/U2 | Availability: Fall | Prerequisites: BIMS 101; BIMS 110, VIBS 111, or equivalent; freshman or sophomore classification.
- VIBS 222: Great Poisonings of the World | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U1/U2 | Availability: Fall/Spring | Prerequisites: None
- VIBS 243: Introductory Mammalian Histology | Credits: 2 credit hours | Lab Requirement: None | Class Specification: U1/U2 | Availability: Fall, Spring | Prerequisites: None

- VIBS 277/NRSC 277 Essential Neuroscience From Molecules to Nervous Systems | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U2 | Availability: Fall, Spring | Prerequisites: Sophomore classification and approval of instructor. Cross Listing: NRSC 277/VIBS 277.
- VIBS 285 Directed Studies | Credits: 0 to 4 credit hours | Lab Requirement: Varies on section | Class Specification: U2 | Availability: Fall, Spring | Prerequisites: Freshman or sophomore classification and approval of department head. Forms on our website here: <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>
- VIBS 310: Biomedical Writing | Credits: 1 credit hour | Lab Requirement: None |
  Class Specification: U3/U4 | Availability: Spring, Fall | Prerequisites: Grade of C or
  better in BIOL 112, CHEM 228, PHYS 202 and MATH 142 or 151; junior or senior
  classification.
- VIBS 311: Biomedical Explorations through Narrative | Credits: 1 credit hour |
  Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring |
  Prerequisites: Grade of C or better in BIOL 112, CHEM 228, PHYS 202 and MATH
  142 or 151; junior or senior classification.
- VIBS 343 Histology | Credits: 3 credit hour | Lab Requirement: 3 Lab Hours |
   Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: BIOL 112;
   CHEM 228; junior or senior classification; BIMS major with a minimum overall 2.5
   Texas A&M GPA.
- VIBS 401: Developmental Neurotoxicology | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall/Spring | Prerequisites: Must have Organic Chemistry II completed
- VIBS 424/VTPP 424 Biomedical Neuroendocrinology and Endocrine Disorders |
   Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 |
   Availability: Fall, Spring | Prerequisites: Honors, junior or senior classification, or
   approval of instructor. Cross Listing: VTPP 424/VIBS 424.
- VIBS 446: Functional Anatomy of Domestic Animals | Credits: 4 Credit Hours |
   Lab Requirement: 2 Lab Hours | Class Specification: None | Availability: Fall,
   Spring | Prerequisites: BIOL 112 w/Min Grade C and CHEM 228 w/Min Grade C.
- VIBS 450/NRSC 450 Mammalian Functional Neuroanatomy | Credits: 4 credit hours | Lab Requirement: 2 Lab Hours | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: Junior or senior classification; BIMS, biology, biochemistry, or psychology majors, or neuroscience minors with overall 3.5 Texas A&M GPA; or approval of instructor. Cross Listing: NRSC 450/VIBS 450.
- VIBS 456 Science in Cinema and Society | Credits: 4 credit hours | Lab Requirement: 2 Lab Hours | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: VIBS 310; majors only; junior or senior classification; approval of instructor.

VIBS 485 Directed Studies | Credits: 0 to 4 credit hours | Lab Requirement: Varies on section | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: Junior or senior classification and approval of instructor.. Forms on our website here: <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>

#### Veterinary Large Animal Clinical Science

VLCS 485: Directed Studies | Credits: 1 to 4 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring, Summer | Prerequisites: Approval form required before registration. Forms found on our website here: <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>

#### Veterinary Small Animal Clinical Science

 VSCS 485: Directed Studies | Credits: Variable (1 to 4 credit hours) | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring, Summer | Prerequisites: Approval form required before registration. Forms found on our website here: <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>

## Veterinary Pathobiology

- VTPB 221: Great Diseases of the World | Credits: 3 credit hours | Lab
   Requirement: None | Class Specification: U1/U2 | Availability: Fall, Spring |
   Prerequisites: None
- VTPB 285: Directed Studies | Credits: 1 to 4 credit hours | Lab Requirement: None | Class Specification: U1/U2 | Availability: Fall, Spring, Summer | Prerequisites: Approval form required before registration.
- VTPB 409: Introduction to Immunology | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: None
- VTPB 426 Biomedical Microbiology Lab | Credits: 1 Credit Hour | Lab
   Requirement: 1 Lab Hour | Class Specification: U3 | Availability: Fall, Spring |
   Prerequisites: None.
- VTPB 438: Biomedical Virology | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall | Prerequisites: 3 hours of microbiology or approval of the instructor.
- VTPB 485: Directed Studies | Credits: Variable (1 to 4 credit hours) | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring,

- Summer | Prerequisites: Approval of department head; junior or senior classification. Forms found on our website here: https://vetmed.tamu.edu/bims/advising/advising-forms/
- VTPB 487 Biomedical Parasitology | Credits: 4 credit hours | Lab Requirement: 2 Lab Hours | Class Specification: U3/U4 | Availability: Spring | Prerequisites: BIOL 107 or BIOL 111

# Veterinary Physiology and Pharmacology

- VTPP 123: Foundations of Physiology | Credits: 3 credit hours. | Lab
   Requirement: None | Class Specification: U1/U2 | Availability: TBD | Prerequisites:
   None
- VTPP 208: Analysis and Evaluation of Physiology Education | Credits: 3 credit hours. | Lab Requirement: None | Class Specification: None | Availability: TBD | Prerequisites: VTPP 207
- VTPP 223: Design of Experiments for Physiology Research | Credits: 3 credit hours. | Lab Requirement: 2 Lab Hours | Class Specification: None | Availability: TBD | Prerequisites: VTPP 123
- VTPP 234: Design of Models for Physiology Research | Credits: 3 credit hours. |
   Lab Requirement: None | Class Specification: None | Availability: TBD |
   Prerequisites: None
- VTPP 285: Directed Studies | Credits: 0-4 credit hours. | Lab Requirement: Varies by section | Class Specification: U1/U2 | Availability: TBD | Prerequisites: Approval form by instructor. Forms found on our website here:
   https://vetmed.tamu.edu/bims/advising/advising-forms/
- VTPP 291: Research | Credits: 0-4 credit hours. | Lab Requirement: Varies by section | Class Specification: U1/U2 | Availability: TBD | Prerequisites: Approval form by instructor. Forms found on our website here:
   <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>
- VTPP 425: Pharmacology | Credits: 3 credit hours | Lab Requirement: None |
  Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: VTPP 423 or
  grade of C or better in BIOL 320; junior or senior classification or approval of
  instructor.
- VTPP 427: Applied Biomedical Physiology | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: VTPP 423 or grade of D or better in BIOL 320; junior or senior classification.

- VTPP 438 Analysis of Genomic Signals | Credits: 3 credit hours | Lab Requirement: 2 Lab Hours | Class Specification: U3/U4 | Availability: TBD | Prerequisites: VTPP 423 or grade of C or better in BIOL 320; junior or senior classification.
- VTPP 444: Practicum in Biomedical Research | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Spring | Prerequisites: VTPP 223 and VTPP 224, or VTPP 234 and VTPP 235, or VTPP 232 and VTPP 233, or VTPP 207 and VTPP 208; junior or senior classification; instructor approval.
- VTPP 485: Directed Studies | Credits: 1 to 4 credit hours | Lab Requirement:
   None | Class Specification: U3/U4 | Availability: Fall, Spring, Summer |
   Prerequisites: Approval form required before registration. Forms found on our website here: <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>
- VTPP 489: Special Topics in . . . | Credits: 1 to 4 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Not always scheduled | Prerequisites: TBD
- VTPP 491 Research | Credits: 1 to 4 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring, Summer | Prerequisites: Approval form required before registration. Forms found on our website here: <a href="https://vetmed.tamu.edu/bims/advising/advising-forms/">https://vetmed.tamu.edu/bims/advising/advising-forms/</a>