SPRING 2025 BIMS DIRECTED ELECTIVES

ANIMAL SCIENCE (ANSC)

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 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)

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

BIOCHEMISTRY (BICH)

BICH 411: Comprehensive Biochemistry II | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall/Spring | Prerequisites: Grade of C or better in BICH 410; junior or senior classification or approval of instructor.

BICH 412: Biochemistry Laboratory I | Credits: 1 credit hour | Lab Requirement: Lab required | Class Specification: U3/U4 | Availability: Fall/Spring | Prerequisites: BICH 410 or registration therein.

BICH 414: Biochemical Techniques I | Credits: 2 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Spring | Prerequisites: BICH 440, BICH 409, or BICH 410

BICH/GENE 431: Molecular Genetics | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | 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/GENE 432: Laboratory in Molecular Genetics | Credits: 2 credit hours | Lab Requirement: Lab required | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: GENE 301, GENE 302, GENE 303, BIMS 320 or GENE 320; BICH 431 or GENE 431. Cross-listed with GENE 432.

BIOLOGY (BIOL)

BIOL 213: Molecular Cell Biology Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U1/U2 | Availability: Fall, Spring | Prerequisites: : BIOL 112 and CHEM 120 (MUST contact **BIOL** department for any necessary override)

BIOMEDICAL SCIENCES (BIMS)

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 289: Special Topics in . . . | Credits: 1 to 4 credit hours | Lab Requirement: Varies | Class Specification: No restrictions | Availability: Not always scheduled | Prerequisites: TBD

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 380: Equine-Assisted Activities and Therapies: Best Practices | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall 2023, Spring 2024 (tentatively) | Prerequisites: None

BIMS/GENE 421: Advanced Human Genetics | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Spring | Prerequisites: GENE 302; BICH 410 or BICH 440. Cross-listed with GENE 421.

BIMS 481: Seminar in Biomedical Science | Credits: 1 credit hour | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Fall, Spring (tentatively) | 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

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

BIMS 489: Special Topics in . . . | Credits: 1 to 4 credit hours | Lab Requirement: Varies | Class Specification: U3/U4 | Availability: Not always scheduled | Prerequisites: Junior or senior classification; BIMS major with a minimum overall 2.5 TAMU GPA.

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

COMMUNICATION (COMM)

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

ENTOMOLOGY (ENTO)

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 | 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 425: Disease Ecology | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Spring | Prerequisites: ENTO 208, ENTO 209 and ENTO 423; junior or senior classification, or approval of instructor.

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

ENTO/FIVS 432: Applied Forensic Entomology | Credits: 1 credit hour | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Spring | Prerequisites: None

HEALTH (HLTH)

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

MARKETING (MKTG)

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)

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.

POULTRY SCIENCE (POSC)

POSC 454: Animal Welfare | Credits: 3 credit hours | Lab Requirement: No lab required | Class Specification: U3/U4 | Availability: Spring only | Prerequisites: None.

URBAN PLANNING (URPN)

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 INTEGRATED BIOSCIENCES (VIBS)

VIBS 111: Biodefense, Biosecurity, and Bioterrorism | Credits: 1 credit hour | Lab Requirement: None | Class Specification: U1/U2 | Availability: Fall, Spring | Prerequisites: None

VIBS 210: 21st Century Global One Health | Credits: 1 credit hour | Lab Requirement: None | Class Specification: U1/U2 | Availability: Fall/Spring | 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 310: Biomedical Writing | Credits: 1 credit hour | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall only (education abroad-only at this time) | 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 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 411: Tumor Cell Biology and Carcinogenesis** | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Spring | Prerequisites: BIMS 320 or equivalent; junior or senior classification.

VIBS 422: Endocrine Toxicology | Credits: 4 credit hours | Lab Requirement: None | Class Specification: U4 | Availability: Fall, Spring | Prerequisites: Must have Organic Chemistry II completed

VIBS 443: Biology of Mammalian Cells and Tissues | Credits: 4 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: None

LARGE ANIMAL CLINICAL SCIENCES (VLCS)

VLCS 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.

SMALL ANIMAL CLINICAL SCIENCES (VSCS)

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.

VETERINARY PATHOBIOLOGY (VTPB)

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: Variable (1 to 4 credit hours) | Lab Requirement: None | Class Specification: U1/U2 | Availability: Fall, Spring, Summer | Prerequisites: Approval form required before registration.

VTPB 301/RWFM 309: Wildlife Diseases | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: Junior classification or approval of department head. Cross-listed with RWFM 309.

VTPB 407: Advanced Veterinary Microbiology Laboratory | Credits: 1 credit hour | Lab Requirement: None | Class Specification: U3/U4 | Availability: McAllen only | Prerequisites: VTPB 405, VTPB 409 and VTPB 438 or concurrent enrollment; junior or senior classification.

VTPB 409: Introduction to Immunology | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: None **VTPB 410: Cell Mechanisms of Disease** | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Fall, Spring | Prerequisites: CHEM 227 and CHEM 228, or equivalent; junior or senior classification; biomedical sciences major, biomedical engineering major or related field.

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 460: Mammalian Cell Pathobiology | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Spring | Prerequisites: BIOL 111 and BIOL 112, junior or senior classification or approval of 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.

VETERINARY PHYSIOLOGY & PHARMACOLOGY (VTPP)

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 429: Introduction to Toxicology | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Spring | 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 452: Fetal & Embryo Physiology | Credits: 3 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Spring | Prerequisites: BICH 410 or equivalent, or approval of instructor.

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.

VTPP 489: Special Topics in . . . | Credits: 1 to 4 credit hours | Lab Requirement: None | Class Specification: U3/U4 | Availability: Not always scheduled | Prerequisites: TBD