**ANIMAL BIOLOGY (ABI)**

College of Agricultural & Environmental Sciences

**ABI 050A — Animal Biology Laboratory (2 units)**
*Course Description:* Scientific methods for answering questions in animal biology by doing exercises to demonstrate hypothesis testing and reporting, short laboratory, population and field experiments. Maintain notebooks, analyze data, interpret results and write reports.
*Learning Activities:* Lecture/Lab 4 hour(s).
*Grade Mode:* Letter.

**ABI 050B — Animal Biology (3 units)**
*Course Description:* Basic biological disciplines important to an understanding of practical animal biology issues including the evolution of animal groups, genetic mechanisms, animal physiology as it relates to maintenance and production, and aspects of comparative anatomy, behavior and ecology.
*Prerequisite(s):* BIS 001A, BIS 001B (can be concurrent).
*Learning Activities:* Lecture 3 hour(s).
*Grade Mode:* Letter.

**ABI 050C — Animal Biology (3 units)**
*Course Description:* Animal management and conservation. Societal concerns arising from management and conservation issues, including economics, aesthetics, regulations, safety, public perspectives and advocacy.
*Prerequisite(s):* BIS 001B, BIS 001C; ABI 050A; ABI 050B.
*Learning Activities:* Lecture 3 hour(s).
*Grade Mode:* Letter.

**ABI 092 — Internship in Animal Biology (1-12 units)**
*Course Description:* Office, laboratory or fieldwork off or on campus in research, governmental regulation, policy making, and private enterprise dealing with animal related issues of production, welfare, pest management, biodiversity and the environment. All requirements of Internship Approval Request form must be met.
*Prerequisite(s):* Consent of instructor.
*Learning Activities:* Internship 3-36 hour(s).
*Grade Mode:* Pass/No Pass only.

**ABI 098 — Directed Group Study (1-5 units)**
*Course Description:* Directed group study.
*Learning Activities:* Variable 1-5 hour(s).
*Grade Mode:* Pass/No Pass only.

**ABI 099 — Special Study for Undergraduate (1-5 units)**
*Course Description:* Special study for undergraduate.
*Learning Activities:* Variable 1-5 hour(s).
*Grade Mode:* Pass/No Pass only.

**ABI 102 — Animal Biochemistry & Metabolism (5 units)**
*Course Description:* Water and biological buffers; thermodynamics of metabolism; structure and function of biomolecules; enzyme kinetics and function; membrane biology; digestion and absorption; carbohydrate metabolism.
*Prerequisite(s):* (CHE 002A, CHE 002B, CHE 008A, CHE 008B) or (CHE 118A, CHE 118B).
*Learning Activities:* Lecture 4 hour(s), Discussion 1 hour(s).
*Credit Limitation(s):* Not open for credit to students who have completed BIS 102.
*Grade Mode:* Letter.

**ABI 103 — Animal Biochemistry & Metabolism (5 units)**
*Course Description:* Physiological function and metabolism of lipids and amino acids; integrative metabolism; biochemical basis for nutrient requirements; structure and function of vitamins; mineral metabolism and requirements.
*Prerequisite(s):* ABI 102 or BIS 102.
*Learning Activities:* Lecture 4 hour(s), Discussion 1 hour(s).
*Credit Limitation(s):* Not open for credit to students who have completed BIS 103.
*Grade Mode:* Letter.

**ABI 187 — Animal Biology Seminar (2 units)**
*Course Description:* Seminar leading to development of the Major Proposal for the Animal Biology major.
*Learning Activities:* Seminar 1 hour(s), Discussion 1 hour(s).
*Enrollment Restriction(s):* Junior standing.
*Grade Mode:* Letter.

**ABI 189 — Senior Practicum (2 units)**
*Course Description:* Practicum may be an experimental research project, a library research project or some other creative activity that will serve as a capstone experience for the Animal Biology major.
*Prerequisite(s):* ABI 050A; ABI 050B; ABI 050C; ABI 187; Junior standing.
*Learning Activities:* Independent Study 6 hour(s).
*Repeat Credit:* May be repeated 1 time(s).
*Grade Mode:* Pass/No Pass only.

**ABI 189D — Senior Practicum Discussion (1 unit)**
*Course Description:* Helps prevent or solve problems during the students’ senior practicum activity.
*Prerequisite(s):* ABI 050A; ABI 050B; ABI 050C; ABI 187; Junior standing.
*Learning Activities:* Discussion 1 hour(s).
*Grade Mode:* Pass/No Pass only.

**ABI 192 — Internship in Animal Biology (1-12 units)**
*Course Description:* Office, laboratory or fieldwork off or on campus in research, governmental regulations, policy making, and private enterprise dealing with animal related issues of production, welfare, pest management, biodiversity and the environment. All requirements of Internship Approval Request form must be met.
*Prerequisite(s):* Consent of instructor; completion of 84 units.
*Learning Activities:* Variable.
*Grade Mode:* Pass/No Pass only.

**ABI 198 — Directed Group Study (1-5 units)**
*Course Description:* Directed group study.
*Learning Activities:* Variable 1-5 hour(s).
*Grade Mode:* Pass/No Pass only.
ABI 199 — Special Study for Advanced Undergraduate (1-5 units)

Course Description: Special study for advanced undergraduate.
Learning Activities: Variable 1-5 hour(s).
Grade Mode: Pass/No Pass only.