BIOLOGY/ZOOLOGY 101 — ANIMAL BIOLOGY
3 credits.

General biological principles. Topics include: evolution, ecology, animal behavior, cell structure and function, genetics and molecular genetics and the physiology of a variety of organ systems emphasizing function in humans.

**Requisites:** Not recommended for students with credit already in Zoology/Biology/BOTANY/BIOLOGY/ZOOLOGY 151 or 152

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

**Level:** Elementary

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

BIOLOGY/ZOOLOGY 102 — ANIMAL BIOLOGY LABORATORY
2 credits.

General concepts of animal biology at an introductory level. The general body plans and strategies used to accomplish the basic tasks of staying alive of 9 major animal groups are studied using preserved and live animals. The diversity within each group of animals is studied by integrating the body plans with the lifestyle and ecology of the animals. The evolutionary relationships between the animals is a major part of the course. Dissections of earthworm, freshwater mussel, squid, sea star, and rat also aid the study of these general principles.

**Requisites:** Not recommended for students with credit already in Zoology/Biology/BOTANY/BIOLOGY/ZOOLOGY 151/152

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

**Level:** Elementary

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

BIOLOGY/BOTANY 130 — GENERAL BOTANY
5 credits.

Introduction to the basic principles and concepts of the biology of plants. an integrative approach stressing evolutionary sequences and the relationship between structure and function at succeeding levels of organization: molecule, cell, organism, population, community. Correlated lectures, laboratories, and discussions. HS or coll chem crse recommended.

**Requisites:** Open to Fr; not open to stdts who have taken BOTANY 100 or Botany/ZOOLOGY/BIOLOGY/BOTANY/BOTANY 151-152

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

**Level:** Elementary

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

BIOLOGY/BOTANY/ZOOLOGY 151 — INTRODUCTORY BIOLOGY
5 credits.

First semester of a two semester course designed for majors in biological sciences. Topics include: cell structure and function, cellular metabolism (enzymes, respiration, photosynthesis), information flow (DNA, RNA, protein), principles of genetics and selected topics in Animal Physiology.

**Requisites:** Not recommended for students with credit already in Zoo/Bio 101, 102 or Botany/Bio 130

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

**Level:** Elementary

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

BIOLOGY/BOTANY/ZOOLOGY 152 — INTRODUCTORY BIOLOGY
5 credits.

Second semester of a two semester course designed for majors in biological sciences. Continuation of 151. Topics include: selected topics in plant physiology, a survey of the five major kingdoms of organisms, speciation and evolutionary theory, and ecology at multiple levels of the biological hierarchy. Not recommended for students with credit already in Zoology/BIOLOGY/ZOOLOGY 101,102 or Botany/BIOLOGY/BOTANY 130

**Requisites:** Biology/Botany/ZOOLOGY/BIOLOGY/BOTANY 151.

**Course Designation:** Gen Ed - Communication Part B

**Level:** Elementary

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

BIOLOGY 299 — DIRECTED STUDIES
1-4 credits.

Graded on a letter basis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

BIOLOGY 375 — SPECIAL TOPICS
1-5 credits.

Enroll Info: Requisite varies by topic

**Requisites:** None

**Course Designation:** Level - Elementary

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

Last Taught: Spring 2017

BIOLOGY 399 — INTERNSHIP/FIELD EXPERIENCE
1-8 credits.

Graded on a letter basis.

**Requisites:** So st cons of supervising inst, advisor internship progm coordinator

**Course Designation:** Level - Intermediate

**L&S Credit:** Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions
BIOLOGY/GENETICS 522 — EVOLUTION SEMINAR SERIES - UNDERGRADUATE
1 credit.

The Evolution Seminar Series exposes students to diverse topics in contemporary evolutionary biology. Most weeks, one or more guest lecturers present their own primary research on a specialized topic in evolutionary biology. Diverse seminars include perspectives from genetics, ecology, geoscience, zoology, botany, microbiology, systematics, molecular biology, and integrative research. Some weeks feature special topics and discussions on pedagogical, legal, outreach, or other issues in evolutionary biology. Students learn to think critically about methodology, experimental design and interpretation, and how conclusions are reached in evolutionary biology by reading primary and secondary literature, attending seminars, discussing topics with speakers and other students, moderating discussions, and preparing a written report.

Requisites: Prior or concurrent enrollment in ZOOLOGY/ANTHRO/BOTANY 410

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No

BIOLOGY/MICROBIO 525 — ADVANCED BIOLOGICAL LABORATORY PRACTICES: A RESEARCH EXPERIENCE
2 credits.

Theory and practice of techniques typically used in microbiological and related biological research; biological experimental data interpretation and analysis; practice writing a research paper, reading primary literature, presenting their work to peers, and self-directing an independent research project (including keeping accurate lab notebooks); critical thinking in controversial scientific research ethics.

Requisites: MICROBIO 303 and 304

Course Designation: Breadth - Biological Sci. Counts toward the Natural Sci req
Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No

BIOLOGY 675 — SPECIAL TOPICS
1-5 credits.

Enroll Info: Requisite varies by topic

Requisites: None

Course Designation: Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions
Last Taught: Fall 2015

BIOLOGY 681 — SENIOR HONORS THESIS
2-3 credits.

Graded on a letter basis.

Requisites: 2 sem of coll biol cons inst
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Honors - Honors Only Courses (H)
Repeatable for Credit: No

BIOLOGY 691 — SENIOR THESIS
2-3 credits.

Graded on a letter basis.

Requisites: 2 sem of coll biol cons inst
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No

BIOLOGY 692 — SENIOR HONORS THESIS
2-3 credits.

Graded on a letter basis.

Requisites: 2 sem of coll biol cons inst
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: No

BIOLOGY 699 — DIRECTED STUDIES
1-4 credits.

Graded on a letter basis.

Requisites: 2 sem of coll biol cons inst
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Repeatable for Credit: Yes, unlimited number of completions