ORGANISMAL BIOLOGY

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BACHELOR OF SCIENCE

At least 124 hrs. (of which 45 must be Jr/Sr hrs.—courses numbered 300 or above) **must be completed for graduation.**

Completing the minimum requirements listed on this sheet will result in **113 overall hrs**. and **49 Jr/Sr hrs.**

Double majors must complete at least 15 hrs. unique to the major.

I. General College Requirements (33 hrs):

English (9 hrs.): ENGL 101 ___; ENGL 102 (or 105) ___; ENGL 203 (or 205, 209, 210, 211) ___

Argument & Reason (3 hrs., one of the following): ___
COMS 130, 230, PHIL 148, 310

Western Civilization (6 hrs.): HWC 204 (or 114) ___; HWC 205 (or 115) ___

Principal Course and/or Foreign Language Requirements *(No more than one course from each topical subgroup from the principal course list can be applied toward fulfillment of this requirement.* See: http://www2.ku.edu/~clasus/pnwc/principal_courses.shtml*):*

Social Science (3 hrs.) _____; ***Humanities (3 hrs.)*** _____; and three additional courses in foreign language, social sciences, or humanities: _____, _____, _____.

II. General Science Requirements (28-29 hrs):

_____ CHEM 184 Foundations of Chemistry I (5 hrs.)
_____ CHEM 188 Foundations of Chemistry II (5 hrs.)
_____ CHEM 622 Fund. Organic Chem. (3 hrs.) ***OR***
CHEM 624 Organic Chem. I (3 hrs.)
_____ CHEM 625 Organic Chemistry I lab (2 hrs.)
_____ MATH 121 Calculus I (5 hrs.) ***OR***
MATH 115 & MATH 116 Calculus I & II (6 hrs.)
_____ PHSX 114 & PHSX 115 Coll. Physics I/II (8 hrs.) ***OR***
_____ PHSX 211 & PHSX 212 Gen. Physics I & II (8 hrs.)

III. General Biology Requirements (18 hrs.):

_____ BIOL 150 (or 151, Honors) Prin. of Molecular & Cellular Biology (4 hrs.)
_____ BIOL 152 (or 153, Honors) Principles of Organismal Biology (4 hrs.)
_____ BIOL 350 Principles of Genetics (3 hrs.)
_____ BIOL 412 Evolutionary Biology (3 hrs.)
_____ BIOL 600 Introductory Biochemistry (4 hrs.)

IV. Organismal Biology Requirements (24 hrs.)

_____ BIOL 408 Physiology of Organisms (3 hrs.)
_____ BIOL 409 Physiology of Organisms Lab. (2 hrs.)
_____ BIOL 599 Senior Seminar, Organismal Biology (1 hr.)
(must be taken in senior year)

____ ***TWO OF THE FOLLOWING THREE COURSES (6 hrs.)***
BIOL 413 History and Diversity of Organisms (3 hrs.)
BIOL 414 Principles of Ecology (3 hrs.)
BIOL 550 Intro. to Systematics (3 hrs.)

_____ ***ONE OF THE FOLLOWING TWO COURSES (3 hrs.)***
BIOL 416 Cell Structure and Function (3 hrs.)
BIOL 417 Biology of Development (3 hrs.) *(may not count here if used as a Development Group course)*

A minimum of at least one course from each of the following three groups: (9 hrs.)

_____ **Development Group**:
BIOL 417 Biology/Development; BIOL 545 Evolution/Development; BIOL 608 Developmental Plant Anatomy; BIOL 692 Developmental Genetics; BIOL 710 Insect Develop.; BIOL 717 Insect Ecology/ Behavior.

_____ **Function Group**:
BIOL 435 Introduction to Neurobiology; BIOL 503 Immunology; BIOL 506 Pathogenic Microbiology; BIOL 555 General Plant Physiology; BIOL 606 Ecological Plant Physiology; BIOL 644 Comparative Animal Physiology; BIOL 646 Mammalian Physiology; BIOL 673 Cellular & Molecular Neurobiology; BIOL 703 External Insect Morphology; BIOL 716 Insect Physiology; BIOL 774 Physiology of Reproduction; BIOL 776 Mammalian Neuroanatomy.

_____ **Diversity Group**:
ANTH 440 History of Primates; BIOL 400 Fundamentals of Microbiology; BIOL 493 Introduction to Ornithology; BIOL 494 Introduction to Mammalogy; BIOL 500 Biology of Insects; BIOL 509 Biology of Spiders; BIOL 510 Comparative Anatomy; BIOL 511 Biology of Spiders lab; BIOL 512 General Virology; BIOL 533 Biology of Fungi; BIOL 540 General Invertebrate Zoology; BIOL 583/783 Herpetology; BIOL 592/792 Ichthyology; BIOL 603 Systematic Botany; BIOL 613 Biology of Honeybees; BIOL 622 Invertebrate Paleontology; BIOL 640 Biology & Evolution of Fossil Plants; BIOL 709 Immature Insects; BIOL 711 Insect Systematics; BIOL 793 Ornithology.

V. Elective/Laboratory Requirements (10 hrs.):

BIOL courses numbered 400 or higher, including at least 2 hrs. of lab credit and 1 hr. of a seminar/topics course (BIOL 419, 420, 701). Courses listed above which have not been used to fulfill the above requirements may be used as electives. No more than 3 hrs. of BIOL 423 Non-Lab Independent Study and/or BIOL 424 Independent Study (combined) can be applied towards the elective requirement with no more than 2 hours of BIOL 424 being applied towards the laboratory requirement.

BIOL _____ (___ hrs.) BIOL _____ (___ hrs.)

BIOL _____ (___ hrs.) BIOL _____ (___ lab hrs.

BIOL _____ (___ seminar hrs.)