

B.S. BIOLOGY

GENETICS

To learn about requirements for admission to the major, please visit our online course catalog page: <http://www2.ku.edu/~distinction/cgi-bin/admission368>

GENERAL EDUCATION REQUIREMENTS (33 h)

Written Communication (9 h): ENGL 101 ENGL 102/105 ENGL 203, 205, 209, 210, or 211

Argument & Reason (3 h): COMS 130, COMS 230, PHIL 148, or PHIL 310

Western Civilization (6 h): HWC 204/114 HWC 205/115

Principal course and/or second language requirements (No more than one course from each topical subgroup from the principal course list can be applied toward fulfillment of this requirement: http://clas.ku.edu/undergrad/curriculum/principal_courses)

Social Science (3 h) (SC/SF/SI): Humanities (3 h) (HL/HR/HT):

3 additional courses in social sciences (SC/SF/SI), humanities, (HL/HR/HT), and/or second language: _____ _____ _____

GENERAL SCIENCE REQUIREMENTS (28–30 h)

CHEM 184/130[§] Foundations of Chemistry I (5) CHEM 625/331[§] Organic Chemistry I Lab (2)

CHEM 188/135[§] Foundations of Chemistry II (5) MATH 121 Calculus I (5) **OR** MATH 115 & 116 Calculus I & II (6) ()

CHEM 622/310[§] Fund Organic Chemistry (3) **OR** PHSX 114 & 115 College Physics I & II (8) **OR**

CHEM 624/330[§] *Organic Chemistry I (3) PHSX 211 & 212 (8)/PHSX 211+216 & 212+236[^] (9) Gen. Physics I & II

[§] CHEM course numbers change beginning Fall 2013. Refer to your Degree Progress Report (DPR) and classes.ku.edu.

*Students planning to enter graduate school (particularly those interested in applying molecular techniques) or medical school are advised to enroll also in CHEM 626 & 627.

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GENERAL BIOLOGY REQUIREMENTS (24 h)

BIOL 150/151 Prin Molecular & Cell Biol (4) BIOL 416/536 Cell Structure & Function (3)

BIOL 152/153 Prin Organismal Biology (4) BIOL 570 Introduction to Biostatistics (3)

BIOL 412 Evolutionary Biology (3) BIOL 600 Introductory Biochemistry, Lectures (4)

One (3 h) of the following three courses:

BIOL 400/401 Fundamentals of Microbiology (3) BIOL 417 Biology of Development (3)

BIOL 408 Physiology of Organisms (3)

GENETICS REQUIREMENTS (15 h)

BIOL 350/360 Principles of Genetics (3) BIOL 672 Gene Expression (3)

BIOL 405 Laboratory in Genetics (2) BIOL 599 Senior Seminar: Genetics (1) (must be taken Sr yr)

Two courses (6 h) from the following list:

BIOL 512 General Virology (3) BIOL 747 Quantitative Genetics (3)

BIOL 518 Microbial Genetics (3) BIOL 753 Advanced Genetics (3)

BIOL 595 Human Genetics (3) BIOL 755 Mechanisms of Development (3)

BIOL 655 Behavioral Genetics (3) ANTH 340 Human Variation and Evolution (3)

BIOL 688 Molecular Biology of Cancer (3) ANTH 442 Anthropological Genetics (3)

BIOL 743 Population Genetics (3) ANTH 652 Population Dynamics (3)

GENETICS ELECTIVE AND LABORATORY REQUIREMENTS (8 h): BIOL courses numbered 400 or higher, including ≥ 3 h of lab credit and ≥ 2 h of seminar/topics course (BIOL 419, 420, 499, 701). Courses listed above that have not been used to fulfill the above requirements may be used as electives. No more than 3 h 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 h of BIOL 424 being applied towards the laboratory requirement.

BIOL _____ (__ h) BIOL _____ (__ lab h)

BIOL _____ (__ lab h) BIOL _____ (__ seminar h)

- At least 120 h (of which 45 must be Jr/Sr h—courses numbered 300 or above) must be completed for graduation. **120 h** **45 Jr/Sr h**
- Completing the minimum degree requirements set forth above results in **108 overall h** and **44 Jr/Sr h**. Double majors must complete ≥ 15 h in the major (i.e., not in General Education Requirements or General Science Requirements) that are *unique* to that major. **108 h** **44 Jr/Sr h**