

# B.S. BIOLOGY

## CELL BIOLOGY

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](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 (31–33 h)

CHEM 184/130<sup>§</sup> Foundations of Chemistry I (5)  CHEM 626/335<sup>§</sup> Organic Chemistry II (3)

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

CHEM 624/330<sup>§</sup> Organic Chemistry I (3)  PHSX 114 & 115 College Physics I & II (8) **OR**

CHEM 625/331<sup>§</sup> Organic Chemistry I Lab (2)  PHSX 211 & 212 (8)/PHSX 211+216 & 212+236<sup>^</sup> (9) Gen. Physics I & II

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

<sup>^</sup> PHSX course numbers change beginning Fall 2013. Refer to your Degree Progress Report (DPR) and [classes.ku.edu](http://classes.ku.edu).

### GENERAL BIOLOGY REQUIREMENTS (21 h)

BIOL 150/151 Prin Molecular & Cell Biol (4)  BIOL 408 Physiology of Organisms (3)

BIOL 152/153 Prin Organismal Biology (4)  BIOL 412 Evolutionary Biology (3)

BIOL 350/360 Principles of Genetics (3)  BIOL 600 Introductory Biochemistry, Lectures (4)

### CELL BIOLOGY REQUIREMENTS (19 h)

BIOL 416/536 Cell Structure & Function (3)  BIOL 426 Laboratory in Cell Biology (3)

BIOL 417 Biology of Development (3)  BIOL 599 Senior Seminar: Cell Biology (1) (*must be taken Sr yr*)

Cell Biology Electives—9 h from the following:    ()

BIOL 400/401 Fundamentals of Microbiology (3)

BIOL 646 Mammalian Physiology (4)

BIOL 402 Fundamentals of Microbiology Lab (2)

BIOL 673 Cellular and Molecular Neurobiology (3)

BIOL 435 Introduction to Neurobiology (3)

BIOL 688 Molecular Biology of Cancer (3)

BIOL 503 Immunology (3)

BIOL 719 Light and Electron Microscopy (3)

BIOL 504 Immunology Laboratory (2)

BIOL 752 Cell Biology (3)

BIOL 512 General Virology (3)

BIOL 755 Mechanisms of Development (3)

BIOL 513 Virology Laboratory (2)

BIOL 756 Cell and Tissue Culture Laboratory (3)

BIOL 570 Introduction to Biostatistics (3)

**CELL BIOLOGY SEMINAR AND LABORATORY REQUIREMENTS (4 h):** ≥ 2 h of lab credit (BIOL lab numbered 400 or higher) and ≥ 2 h of a seminar/topics course (BIOL 419, 420, 499, 701). Two h of BIOL 424 will satisfy the lab requirement.

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**