

BIOCHEMISTRY

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 **114 overall hrs.** and **42 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 (44 hrs):

- _____ CHEM 184 Foundations of Chemistry I (5 hrs.)
- _____ CHEM 188 Foundations of Chemistry II (5 hrs.)
- _____ CHEM 516 Analytical Chemistry (3 hrs.)
- _____ CHEM 624 Organic Chem. I (3 hrs.)
- _____ CHEM 625 Organic Chem. I lab (2 hrs.)
- _____ CHEM 626 Organic Chem. II (3 hrs.)
- _____ CHEM 627 Organic Chem. II lab (2 hrs.)
- _____ CHEM 640 Biol. Physical Chem. (3 hrs.) **OR**
- _____ CHEM 646 Physical Chem. (3 hrs.)
- _____ MATH 121 & MATH 122 Calculus I & II (10 hrs.)
- _____ PHSX 211 & PHSX 212 Gen. Physics I/II (8 hrs.) **OR**
- _____ PHSX 114 & PHSX 115 College Physics I/II (8 hrs.)

III. Biochemistry Requirements (25 hrs.):

- _____ BIOL 150 (or 151, Honors) Principles 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 636 Biochemistry I (3 hrs.)
- _____ BIOL 637 Introductory Biochemistry Laboratory (2 hrs.)
- _____ BIOL 638 Biochemistry II (3 hrs.)
- _____ BIOL 639 Advanced Biochemistry Laboratory (2 hrs.)
- _____ BIOL 672 Gene Expression (3 hrs.)
- _____ BIOL 599 Senior Seminar in Biochemistry (1 hr.)
(must be taken in senior year)

IV. Elective Requirements (12 hrs.):

Biology courses, numbered 400 or higher, must be selected in consultation with a Biochemistry advisor. Some suggested courses are:

- BIOL 400 Fundamentals of Microbiology
- BIOL 408 Physiology of Organisms
- BIOL 416 Cell Structure & Function
- BIOL 424 Independent Study
- BIOL 430 Laboratory in Molecular Biology
- BIOL 518 Microbial Genetics
- BIOL 688 Molecular Biology of Cancer

or biology courses having a biochemistry course as a prerequisite. 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.

BIOL ____ (____ hrs.)

BIOL ____ (____ hrs.)

BIOL ____ (____ hrs.)

BIOL ____ (____ hrs.)

BIOL ____ (____ hrs.)