

Biomedical Sciences, BS

Academic Plans

Four-Year Graduation Plan

The following checkpoints list the minimum requirements students must complete by certain semesters in order to stay on the university's Four-Year Graduation Plan. Courses in the major are those required to complete the major; they may be offered by departments other than the major department.

Before the fifth semester begins: CHEM:1110 Principles of Chemistry I, CHEM:1120 Principles of Chemistry II, BIOL:1411 Foundations of Biology, PSY:1001 Elementary Psychology, SOC:1010 Introduction to Sociology, MATH:1460 Calculus for the Biological Sciences or MATH:1550 Engineering Calculus I or MATH:1850 Calculus I, CHEM:2210 Organic Chemistry I, CHEM:2220 Organic Chemistry II, MICR:2157 General Microbiology, MICR:2158 General Microbiology Laboratory, PHYS:1511 College Physics I, PHYS:1512 College Physics II, and HHP:2400 Fundamentals of Human Physiology.

Before the seventh semester begins: BMB:3120 Biochemistry and Molecular Biology I, BMB:3130 Biochemistry and Molecular Biology II, CHEM:2410 Organic Chemistry Laboratory, BIOL:2512 Fundamental Genetics, and STAT:3510 Biostatistics.

During the eighth semester: enrollment in all remaining coursework in the major, all remaining GE CLAS Core courses, and a sufficient number of semester hours to graduate.

Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

Biomedical Sciences, BS

Course	Title	Hours
Academic Career		
Any Semester		
GE CLAS Core: Sustainability ^a		
Students who earn a major in biomedical sciences may not earn a major in Biology (BA or BS).		
Hours		0
First Year		
Any Semester		
Begin volunteering at a hospital or other healthcare facility in the first year or as early as possible.		
Hours		0
Fall		
CHEM:1110	Principles of Chemistry I ^b	4
MATH:1460	Calculus for the Biological Sciences ^c	4
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric: Writing and Communication	3 - 4
SOC:1010	Introduction to Sociology	3

CSI:1600	Success at Iowa	1
Hours		15-16

Spring		
BIOL:1411	Foundations of Biology	4
CHEM:1120	Principles of Chemistry II	4
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric: Writing and Communication	3 - 4
PSY:1001	Elementary Psychology	3
Hours		14-15

Second Year Any Semester

Shadow a professional and learn more about the field of medicine in the second or third year.

Start the search process for a research lab in the second or third year.

Hours		0
Fall		
BIOL:2512	Fundamental Genetics	4
CHEM:2210	Organic Chemistry I	3
PHYS:1511	College Physics I	4
GE CLAS Core: World Languages First Level Proficiency or elective course ^d		4 - 5
Hours		15-16

Spring		
CHEM:2220	Organic Chemistry II	3
MICR:2157	General Microbiology ^e	3
MICR:2158	General Microbiology Laboratory ^e	2
PHYS:1512	College Physics II	4
GE CLAS Core: World Languages Second Level Proficiency or elective course ^d		4 - 5
Hours		16-17

Third Year Any Semester

Students should start the search process for letters of recommendation in the third or fourth year.

Hours		0
Fall		
BMB:3120	Biochemistry and Molecular Biology I	3
CHEM:2410	Organic Chemistry Laboratory	3
HHP:2400	Fundamentals of Human Physiology	3
STAT:3510	Biostatistics	3
GE CLAS Core: World Languages Third Level Proficiency or elective course ^d		4 - 5
Hours		16-17

Spring		
BIOL:3373	Human Population Genetics and Variation	3
BMB:3130	Biochemistry and Molecular Biology II	3

PSY:2930 or PSY:2130 or CPH:1800	Abnormal Psychology: Health Professions or Advanced Psychology for Pre-Medical Track or Social and Psychological Determinants of Health: Changing Behavior, Improving Health	3
GE CLAS Core: World Languages Fourth Level Proficiency or elective course ^d		4 - 5
Elective course ^f		3
Exam: Take MCAT in spring or summer		
Hours		16-17
Summer		
Admission Application: Apply to medical school		
Hours		0
Fourth Year		
Fall		
Major: elective lecture I ^g		3
Major: research experience ^g		4
GE CLAS Core: Understanding Cultural Perspectives ^h		3
GE CLAS Core: Historical Perspectives ^h		3
GE CLAS Core: International and Global Issues ^h		3
Hours		16
Spring		
Major: elective lecture II ^g		3 - 4
Major: investigative lab ^g		3 - 4
GE CLAS Core: Literary, Visual, and Performing Arts ^h		3
GE CLAS Core: Values and Society ^h		3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) ⁱ		
Hours		12-14
Total Hours		120-128

a Sustainability must be completed by choosing a course that has been approved for Sustainability AND for one of these General Education areas: Natural Sciences; Quantitative or Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Society.

b Enrollment in chemistry courses requires completion of a placement exam.

c Enrollment in math courses requires completion of a placement exam.

d Students who have completed four levels of a single language or two levels of two different languages in high school or college have satisfied the GE CLAS Core World Languages requirement. Students who have completed three levels of a single language may complete a fourth-level course in the same language or may choose an approved World Language and Cultural Exploration course. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course. Contact your academic advisor or CLAS Undergraduate Programs Office with questions concerning the World Languages requirement.

e MICR:2157 and MICR:2158 should be taken in the same semester.

f Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.

g Students complete a total of 13-14 s.h. of elective coursework from approved lists of courses; see General Catalog.

h GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.

i Please see Academic Calendar, on Office of the Registrar website, for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Degree Services.