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 Mathematics I: Single Variable Calculus 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:3500 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:2211 Genes, Genomes, and the Human Condition or 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.

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Course	Title	Hours
Academic Career		
Any Semester		
GE CLAS Core: Sustainability [a]		
	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	3 - 4
SOC:1010	Introduction to Sociology	3
CSI:1600	Success at Iowa	2
	Hours	**16-17**
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	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:2211 or BIOL:2512	Genes, Genomes, and the Human Condition or Fundamental Genetics	3 - 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	**14-16**
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:3500	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
CPH:1800 or PSY:2930 or PSY:2130	Social and Psychological Determinants of Health: Changing Behavior, Improving Health or Abnormal Psychology: Health Professions or Advanced Psychology for Pre-Medical Track	3
GE CLAS Core: World Languages Fourth Level Proficiency or elective course [d]		4 - 5

Exam: Take MCAT in spring or summer

	Hours	13-14

Summer

Admission Application: Apply to medical school

	Hours	0

Fourth Year

Fall

Major: elective lecture I [f]		3
Major: research experience [f]		4
GE CLAS Core: Diversity and Inclusion [g]		3
GE CLAS Core: Historical Perspectives [g]		3
GE CLAS Core: International and Global Issues [g]		3
	Hours	**16**

Spring

BIOL:4898	Communicating Research [f]	2
Major: elective lecture II [f]		3 - 4
Major: investigative lab [f]		3 - 4
GE CLAS Core: Literary, Visual, and Performing Arts [g]		3
GE CLAS Core: Values and Culture [g]		3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) [h]		
	Hours	**14-16**
	Total Hours	**119-128**

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 and Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Culture.

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 years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.

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

f Students complete a total of 15-17 s.h. of elective coursework from approved lists of courses; see General Catalog.

g 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.

h Please see Academic Calendar, 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 Graduation Services.