

Sample Schedule

First Semester (Fall)		Second Semester (Spring)	
	Hrs		Hrs
GEP 101 First Year Foundations	2	CHM 170 General Chemistry II	3
ENG 110 Writing I or COM 115 Fundamentals of Public Speaking	3	CHM 171 General Chemistry Laboratory	1
MTH 261 Calculus I or MTH 287 Comp. Calculus w/Anal. Geom. I ¹	3-5	MTH 280 Anal. Geom. and Calculus I or MTH 288 Computational Calculus II	3-5
CHM 160 General Chemistry I	4	ENG 110 Writing I or COM 115 Fundamentals of Public Speaking	3
CHM 161 General Chemistry I Lab	1	General Education Classes	3
Total Hours	13-15	Total Hours	15-17

Third Semester (Fall)		Fourth Semester (Spring)	
	Hrs		Hrs
CHM 342 Organic Chemistry I	5	CHM 343 Organic Chemistry II	5
CHM 375 Inorganic Chemistry ¹	3	CHM 302 Intro to Analytical Chemistry	5
PHY 123 Introduction To Physics I or PHY 203 Foundations of Physics I	4	PHY 124 Introduction to Physics II or Advanced Biology Electives	3
Advanced Biology Electives	3	Total Hours	17
General Education Class	3		
Total Hours	18		

Fifth Semester (Fall)		Sixth Semester (Spring)	
	Hrs		Hrs
CHM 398 Chemical Symposium	1	CHM 507 Physical Chemistry II ^{2,3}	3
CHM 506 Physical Chemistry I ^{1,3}	3	Chemistry Electives*	3
CHM 508 Beginning Physical Chemistry Lab ^{1,3}	2	General Education and/or Minor	6
ENG 210 Writing II	3	Total Hours	12
General Education and/or Minor	6		
CHM 399 Undergraduate Investigations	1		
Total Hours	16		

Seventh Semester (Fall)		Eighth Semester (Spring)	
	Hrs		Hrs
CHM 502 Techniques of Instrumental Anal. Chemistry Electives*	4	CHM 498 Chemistry Careers	1
General Education and/or Minor	9	Chemistry Electives*	6
Total Hours	16	General Education and/or Minor	9
		Total Hours	16

*Chemistry Electives: CHM 352, 376, 399 or 499 (2-3 hr), 460, 461, 462, 452, 453, 509, 552, 553.

Requirements include: 2.0 GPA in major and minor fields (Chemistry and Mathematics).

Other Requirements include: 40 hours must be in upper level courses (300 level or above).

¹ Offered only in the Fall.

² Offered only in the Spring.

³ CHM 505 may be substituted for CHM 506, 507 and 508.



Pre-Medicine Fact Sheet

Department of Chemistry

College of Natural and Applied Sciences

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Career Preparation

The practice of medicine is devoted to the diagnosis and treatment of disease and trauma. Entry into medical practice may be gained through admission to an allopathic medical school from which the graduate earns an M.D. degree or through admission to an osteopathic medical school from which the graduate earns a D.O. degree. Although there are some differences in education and practice emphases, both types of physicians are licensed health care professionals. Either of the two routes requires a total of about 11 years of formal undergraduate and professional training.

Admission to medical schools remains highly competitive with more students applying than can be admitted. Competitive admission and the long period of educational preparation that is required to become a physician demands that students understand the qualifications and preparations needed to become a viable applicant to medical school. These include a strong personal commitment and a large investment of effort, time and financial resources. Admission becomes possible only when a student possesses high

intellectual and personal abilities and demonstrates a record of academic excellence.

Other qualities sought by medical schools include social consciousness, good interpersonal communication skills and a record of community service and leadership. Activities must demonstrate that the applicant is service- and people-oriented. Medical- and hospital-related experiences demonstrate that the student has the experience to be able to make an informed decision about becoming a physician. Other factors taken into consideration include letters of recommendation, personality, motivation, interview impressions and difficulty of course work. All premedical students are wise to plan for alternate career options while pursuing their undergraduate degree.

Academic Program

Commitment to a premedical program is a professional intention and does not represent an academic major. However, most premedical students choose a science major which incorporates medical school core requirements. Pre-medical students are also urged to participate in the student Pre-Medical Society and other university-sponsored activities.

Courses

All premedical students, regardless of their major, should complete a set of recommended core courses. These courses minimally satisfy entrance requirements to medical schools. Please consult the Missouri State catalog online for specific course information.

Recommended core courses include:

Two semesters of English composition (Writing I and Writing II)

Two semesters of college mathematics, with at least calculus eligibility reached

Two semesters of introductory biological science, including laboratory

Two semesters of general chemistry with laboratory

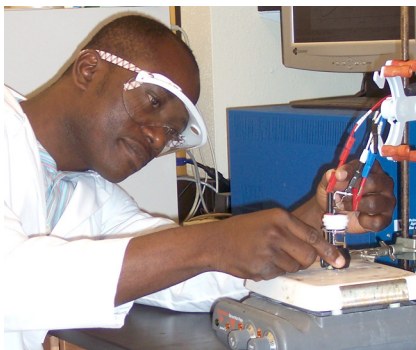
Two semesters of organic chemistry with laboratory

Two semesters of general physics with laboratory

Two semesters of advanced biology courses such as vertebrate or human anatomy, general or human physiology, molecular cell biology, histology, embryology or genetics (human or general)

Details regarding core requirements along with recommended electives may be found in the Premedical Student Handbook. Also, consult the catalog online at www.missouristate.edu/catalog.

A CHEMISTRY major with a BIOCHEMISTRY emphasis incorporates the medical school recommended courses while at the same time preparing students for the Medical College Admissions Test (MCAT), which is taken during the second semester of the junior year.



Pre-medical Advisor:

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