

# PRE-MEDICAL STUDIES (BS)

## Contacts

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Program Website (<https://www.jefferson.edu/academics/colleges-schools-institutes/life-sciences/degrees-programs/undergraduate-programs/pre-medical-studies.html>)

## Program Description

Pre-medical studies is an “umbrella major” providing academic and professional training to students planning to attend medical school as well as other graduate health care institutions. The major is distinguished by a series of unique upper-level science courses whose case history and problem-based learning approach mirrors that of first-year graduate students in the health care professions, and which are designed to develop students’ proficiency in interpreting complex scientific data. Students spend 100 hours developing their empathic, professional and clinical evaluation skills through two hands-on, off-campus preceptorship experiences performed with licensed health care practitioners. Our graduates are nationally competitive, as evidenced by their MCAT, GRE and DAT scores, and more than 90 percent of our students to date have gone on to various successful careers as physicians, dentists, physical therapists, veterinarians, pharmacists, optometrists, podiatrists and chiropractors.

## Learning Goals/Outcomes

- knowledge of health care through hands-on training in HIPAA law, taking history and basic physical measurements and professional conduct with patients
- Demonstrate oral and written communication skills with both lay people and professionals
- Recognize and use medical terminology
- Formal, analytical, synthetic & problem-solving science skills
- Synthesize information from diverse sources to make decisions
- Recognize the social challenges faced in both national and global medical practice
- Comprehend and be able to explain a variety of commonly used clinical laboratory techniques
- Recognize and employ the professional empathy needed in an effective health care professional
- Demonstrate an optimal performance on national standardized graduate school exams (MCAT, GRE, DAT etc.)
- Recognize the varied health care careers and their spheres of expertise

## Curriculum: 4 years, 127-128 credits

Course	Title	Credits
<b>First Year</b>		
FYS 100	Pathways Seminar	1
WRIT 101	Writing Sem I: Written Comm.	3
AVIS 101	American Visions	3
CHEM 103 & 103L	Chemistry I and Chemistry I Lab	4
BIOL 103	Biology I	3
BIOL 103L	Biology I Lab	1
MATH 111	Calculus I	4
CHEM 104 & 104L	Chemistry II and Chemistry II Lab	4
BIOL 104 & 104L	Biology II and Biology II Lab	4
<b>Credits</b>		<b>27</b>
<b>Second Year</b>		
ADIV-2XX	American Diversity	3
WRIT 201	Writing Seminar II: Multi Comm	3
GDIV 2XX	Global Diversity	3
ADIV 2XX	American Diversity	3
BIOL 312	Biostatistics	3
CHEM 201 & 201L	Organic Chemistry I and Organic Chemistry I Lab	4
CHEM 202 & 202L	Organic Chemistry II and Organic Chemistry II Lab	4
MATH 112	Calculus II	4
BIOL 201 & 201L	Human Anatomy and Physiology I and Human Anat & Physiology I Lab	4
BIOL 202 & 202L	Human Anatomy & Physiology II and Human Anat & Physiology II Lab	4
<b>Credits</b>		<b>35</b>
<b>Summer</b>		
BIOL 493	Preceptorship I	3
BIOL 494	Preceptorship II	3
<b>Credits</b>		<b>6</b>
<b>Third Year</b>		
ISEM 3XX	Integrative Seminar	3
GCIT 2XX	Global Citizenship	3
ETHC 2XX	Ethics	3
PHYC 201	Physics I	3
PHYC 201L	Physics I Lab	1
PHYC 203	Phys II: Waves, Elec, & Mag	3
PHYC 203L	Physics II Lab	1
General Electives		6-8
BIO 201	Anatomy&Physiology I	3
or BIO 207/L		
BIO 202	Anatomy&Physiology I Lab	1
BIO 203	Anatomy & Physiology II	3
or BIOL 221/L		
BIO 204	Anatomy & Physiology II Lab	1
BCHM 312	Biochemistry: Proteins	3
BCHM 312L	Biochemistry: Proteins Lab	1
BCHM 313	Biochemistry:Metabolism	3
BCHM 313L	Biochemistry: Metabolism Lab	1
<b>Credits</b>		<b>39-41</b>
<b>Fourth Year</b>		
CGIS 300	Contemporary Global Issues	3
PHIL 499	Philosophies of the Good Life	3
BIOL 207 & 207L	Principles of Genetics and Principles of Genetics Lab	4

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Course	Title	Credits
BIOL 221 & 221L	Microbiology and Microbiology Lab	4
BIOL 413	Pathology	3
Designated Science Elective		3
General Electives		9-12
	<b>Credits</b>	<b>29-32</b>
	<b>Total Credits</b>	<b>136-141</b>