# **Pre-Medicine**

PRE-MEDICAL PROGRAM OF STUDY AT VALDOSTA STATE UNIVERSITY

When planning a program of study, students should keep in mind that there are three different sets of requirements that should be met.

- First are the requirements of the medical school which must be completed before the student matriculates.
- Second are the general requirements set by the University for a particular degree, including those required by the departmental faculty for a specific major.
- Planning must also include completion of courses covering subject matter which will be tested on the MCAT *before* taking the test. These will be discussed below in more detail.

#### **Pre-medical Requirements**

Physicians practicing in the United States obtain either the MD or DO degree. Although allopathic (MD) medical training and osteopathic (DO) medical training may differ in ways that reflect the philosophical differences in their approaches to patient care, both types of medical schools expect applicants to have a solid understanding of basic physical and life sciences. At a minimum this would include one year of study in each of the following subjects: general chemistry, physics, general biology or zoology, and organic chemistry – all with the appropriate laboratories. These are the subjects that are covered in the science sections of the MCAT. Guidelines for applying to medical schools can be found at the websites for the American Medical College Application Service (AMCAS) (https://www.aamc.org/students/applying/amcas/) and American Association of Colleges of Osteopathic Medicine (AACOM) (http://www.aacom.org/Pages/default.aspx). These sites are valuable sources of

information and should be consulted before the application so that you are assured that you have met all requirements for each school to which you apply.

### **Course Selection**

When selecting courses, choose those that will fulfill your graduation requirements for VSU and your major as well as those that will meet the admissions requirements of medical schools. This includes at least one year of biology, two years of chemistry, one year of physics, one year of English, and one year of mathematics. Many medical schools recommend that students take a *variety* of other courses in addition to these. Among the subjects recommended by ten or more medical schools are classes in mathematics, biochemistry, humanities, physical chemistry, embryology, genetics, behavioral science and social science.

Absolute Minimum Science/Math Requirements for entry into medical school:

<b>Biology</b> Principles of Biology I		BIOL 1107 & BIOL 1107 Lab
Principles of Biology II		BIOL 1108 & BIOL 1108 Lab
Genetics		BIOL 3200 (required by most schools)
<b>Chemistry</b> Survey of Chemistry I & II Organic Chemistry		CHEM 1211 & 1212 plus labs CHEM 3401 & 3402 plus labs
Physics		
Introductory Physics I & II		PHYS 1111K & 1112K (algebra based)
	Or	
Principles of Physics I & II		PHYS 2211K & 2212K (calculus based)
Math Analytic Geometry and Calculus I		MATH 2261

## **Additional Courses**

Many of the courses required or recommended by medical schools are also requirements for specific majors at VSU. However, regardless of major, all premedical students should strive to take the following courses unless special circumstances prevent their being scheduled: Biochemistry, Genetics, Microbiology and Cell Biology.

Students should not attempt to take courses that normally comprise the first year curriculum of medical school during their senior year in college, but experience has shown that students with a background in some of those courses have an easier transition when they begin their medical training. This may ease some of the stress and

provide a better start to their professional education. However the desire to obtain a "better background" for medical school should be tempered by the realization that your senior year of college probably will be the last opportunity to explore academic interests outside the field of medicine. Many well-qualified students choose to take a few courses completely unrelated to medicine, science or degree requirements during their senior year in order to indulge in subjects they have always wanted to pursue in depth.

The BS and BA degrees in Biology at VSU provide the flexibility to meet the minimum requirements for medical school as well as allowing the pursuit of other interests. There is also the option to complete the required courses for medical school after receiving a Bachelor's degree. VSU also offers a Post-Baccalaureate program for Pre-Medicine students.

Our diverse faculty has assisted students with more than 250 research projects in the past decade so there are plenty of opportunities for you to get involved with research. The size of the department also is small enough that you can get to know your professors and they can get to know you. This is critical when the time comes for you to request recommendation letters (see below).

#### **Committee Recommendation Letters**

The Pre-Health Professions Student Evaluation Committee meets twice annually (spring & summer) to provide evaluation letters for students applying to graduate programs in medicine, dentistry, veterinary medicine and allied health professions. The dates will be published on the department home page and posted in the Biology Office (2035 BSC).

In order to be considered for review the student must have a *minimum* of 5 completed Letters of Evaluation on file in the Biology office, and submit a written request no later than 10 working days prior to the next scheduled meeting of the committee.

Requests for letters must include all necessary information (eg. AAMC ID, AMCAS Letter ID, address and name of program) for transmittal. IT IS THE RESPONSIBILITY OF THE STUDENT TO PROVIDE THIS INFORMATION – THE COMMITTEE IS NOT REPSONSIBLE FOR INCOMPLETE OR INACCURATE APPLICATIONS. Students should submit requests in a written format (paper or email) at least two weeks in advance of any deadlines to allow time for processing.