## BIOLOGICAL SCIENCES Southeastern Louisiana University Pre-Professional Programs

The Department of Biological Sciences offers Pre-Professional programs in Pre-Medicine including Osteopathic, Chiropractic, Physician Assistant, Pre-Dentisty, Pre-Physical Therapy, Pre-Optometry, Pre-Pharmacy, Pre-Veterinary Medicine, and Pre-Occupational Therapy.

These professional degrees normally are completed at the Doctoral level. Students interested in these programs should normally plan on completing their Bachelor's degree in Biological Sciences before entering the professional school. Some pre-professional schools allow early admission after three years of college if the student has exceptional grades and test scores. In these cases, after graduation from professional school, the student can contact Southeastern about being being awarded a Biology degree based on the professional school degree.

Most pre-professional students should follow the Integrative Biological Sciences or the Microbiology/Molecular Biology concentrations. After their freshman year, the student will be assigned an advisor familiar with the requirements for that particular concentration/program who can give them detailed advice on which courses to take. Potential Honor students should also check with the Honors Department to see what special courses are needed to earn an Honors diploma.

Typical courses which all pre-professional students are encourage to take their first semester of their freshman year include: GBIO 151 and BIOL 152, MATH 161 (or 151 depending on Math ACT score), or 165 or 200, CHEM 121 and CLAB 123 (If Math ACT is high enough), ENGL 101 (depending on English ACT score), SE 101, and LS 102. In addition, other courses that can be taken include Foreign Language at the 101 level, Art, Music, Theater, Dance, History (any 100 or 200 level History), Psychology 101, Sociology 101, and Economics 102. The minimum number of hours to be a full-time student is 12 with the maximum at 19 (unless approved by the Dean). However, most professional schools look at the average number of hours earned per semester and like to see an average around 17-18 and do not like to see a lot of Ws (often considered the same as an "F"). Medical schools have calculated that their load per semester is roughly equal to taking 27-30 hours in college, so the student needs to prove they can handle a heavy load and still get good grades. WARNING: Many professional schools will NOT accept online (internet) classes, AP credit, or any classes with a grade of "P

The typical second semester includes GBIO 153 and BIOL 154, MATH 162 or 165 or 200, ENGL 102, CHEM 122 and CLAB 124, and a foreign language at the 102 level. The student should meet with their advisor to determine the exact course selection for that semester and each semester after that. In addition, the student should become very familiar with the university catalogue, including course pre-requisites and the professional school requirements.

Professional schools are very competitive and most students who start as pre-professionals do not get in. The average undergraduate GPA that professional schools require varies, but in general at least a 3.4 is needed, and more realistically a 3.6-4.0. To achieve that requires making mostly A's and only a few B's. Be aware that it takes three to six A's to bring up one C.

In addition, most professional schools require high scores on a standardized test (such as the MCAT, DAT, GRE). These tests are normally taken the Junior year and are very intense and rigorous tests (much harder than the ACT or SAT). The serious student will start preparing for this test during the Freshman year. When taking a course try to make an A, but also learn as much as possible about the subject. We have found that in general, the students who do well on these tests are the students who read a lot, including newspapers, magazines, journals, and books not required in class.

Many professional schools now require that the student acquires work experience in the field before applying. This can be in a paid or volunteer position. For instance, Physical Therapy schools require a minimum of 60-90 hours working with a Physical Therapist. The Biology Department offers an "internship" course in the Junior year that can be used for this purpose – GBIO 409.

Since the requirements for each professional school varies, it is impossible to list every requirement. The student needs to meet with their assigned advisor to discuss the requirements. The student is also encouraged to join Delta Omega Alpha, which is the Pre-professional student organization. They take tours of professional schools; have invited speakers such as the Dean of Admissions, current medical and dental students, professionals working in the field, etc. Pre-medical and dental students also need to be familiar with the Medical Evaluation Committee requirements. The MEC writes the letters of recommendation. Dr. Volker Stiller is the chairman and can provide more information (also see the Biology website www.southeastern.edu/MEC).