Delta State University

Department of Biological Sciences

B.S. Degree, Biology Major: Premedical Sciences Concentration, Including Optometry Prerequisites

The curriculum described here leads to a BS degree with a major in biology (pre-medical science concentration) and also incorporates all the prerequisites for admission to Southern College of Optometry (SCO) in Memphis, TN. There are 20 schools of optometry in the US. Admission requirements for other optometry schools are similar to those at SCO, but check the exact requirements for schools you plan to apply to as there are some differences. Although admission to SCO only requires 90 credit hours, they give strong preference to applicants who have completed a baccalaureate degree. In recent years, less than 5% of applicants who were admitted had not completed a degree. Although you may choose any DSU major, most pre-optometry students major in biology because all of the required and most of the recommended elective pre-optometry courses can be applied directly to the biology degree. If you wish to pursue a different major, please consult the pre-optometry advisor.

	Courses	Credit	Notes
General Education Re	equirements ————		
English Composition	ENG 101 and ENG 102 or 103	6	Two semesters of English composition
Communication Studies	COM 101 or 202	3	Take either Public Speaking or Interpersonal Communications.
Humanities and Fine Arts: Literature	Any literature course	3	Most students choose ENG 203 or 204
Humanities and Fine Arts: History	Choose one course from: HIS 101, 102, 103, 104, 201, or 202.	3	History of civilization (101/102), world history (103/104), or United States history (201/202)
Humanities and Fine Arts: Fine Arts	Choose one of: ART 101, 212, 401, 402, 405; MUS 114, 115, 116, 117; THE 225, 320	3	Any introduction, appreciation, or history of art, music, or theater course. Those listed are the ones typically chosen (See <i>Bulletin</i> for course descriptions)
Humanities and Fine Arts: Elective	Choose PHY 201 or any course listed above under literature, history, or fine arts.	3	Philosophy or any other humanities or fine arts course from this section.
Perspectives on Society	Choose two of: ANT 101; ECO 210, 211; GEO 201, 303, PSC 103, 201, PSY 101; SOC 101	6	Choose two of the listed courses from the fields of anthropology, economics, geography, political science, psychology, or sociology. (See <i>Bulletin</i> for course descriptions)
Mathematics	(see next section)		Satisfied by mathematics taken for Special Degree Requirements
Personal Development	Choose from: CEL 300, CIS 205, FCS 215, FCS 270, FCS 325, FCS 343, foreign language, LIB 101, PER (100 level), SHS 360, SWO 101, or SWO 300	2-3	Choose from: child study, computer applications, personal finance, family development, marriage and family living, nutrition, foreign language, information literacy, physical education, sign language, volunteering in the community, and human diversity. (see <i>Bulletin</i> for descriptions). CIS 205 is recommended for most science majors.
Writing Proficiency	ENG 300, ENG 301, passing CAAP score, or passing GRE writing score	0-3	Satisfied by passing the Writing Proficiency Exam (ENG 300) or ENG 301, a score of 3 or higher on the CAAP exam, or a score of 3.5 or higher on the GRE writing component. See your advisor for more information.
		29-33	
Special Degree Requi		0.10	
Chemistry	CHE 101, 102, 103, 104	8-10	First and second semesters of general chemistry with laboratories
Mathematics	MAT 104, 105, 251, 300 or MAT 251, 300	6-12	College algebra and trigonometry plus one semester each of calculus and statistics. Students who are exempt from 100-level math courses are only required to take calculus and statistics. (Either option satisfies general education mathematics.)
		14-22	
Major Requirements - Biology Core	BIO 100, 101, 300, 301, 328	20	Principles of biology I and II, cell biology, ecology, and genetics.
400-level electives	Four BIO courses at the 400-level (except BIO 470)	12-16	Any 400-level biology course, except internship, can count in this category. Your advisor will help you choose courses that best fit your interests and goals. Recommended courses for pre-optometry that fall in this category include histology and immunology.
BIO electives	All BIO courses are eligible except those described as "not for biology major credit." Must include BIO 217.	12-16	Choose any biology courses except those designated for non-science majors. Microbiology (BIO 217) must be included in this category as it required by optometry schools.
Advanced chemistry	CHE 319, 320, 321, 322, and 440	12-14	Two semesters of organic chemistry plus biochemistry. (Optometry school requires only one semester of organic, but organic I and II are prerequisites for biochemistry, and are required for the pre-medical science concentration. Organic I and II are also considered essential preparation for the OAT.
Physics	PHY 221/233 and 222/234	8	Two semesters of physics for the life sciences with laboratories

Biology: Pre-Optometry 2/22/2017 Page 1 of 2

Recommended electives —				
Advisor recommendations	Consult your advisor	Advisors help students choose courses related their interests, career goals, and preparation for any professional or graduate programs. You must take enough electives to bring your total credit to at least 124.		

Additional Notes:

- The optometry program at SCO begins each August. The application period begins July 15th of the previous year. Admission decisions are done on a rolling basis beginning in mid-September. Although the application deadline is March 1st, you must apply as early as possible. Most slots are filled well in advance of this deadline. Start your application process in July of the year before you plan to graduate.
- A baccalaureate degree from Delta State requires a minimum of 124 credit hours. Of that 124 hours, at least 62 must be taken at a senior college, at least 31 must be taken at DSU, and at least 40 must be 300- or 400-level courses. Courses taken at 2-year schools cannot be counted at the 300- or 400-level. 24 of the last 30 hours must be taken at DSU.
- Enrollment in upper-level BIO courses (BIO 200 and above) requires that you have "Full Admission" status. You have full admission status if you have completed BIO 100, 101, and CHE 101, 102, 103, and 104 with no grades below C. Consult the Bulletin or the Department of Biological Sciencesweb site, or see your advisor for more information.
- Applicants to optometry schools must submit an official score on the Optometry Admissions Exam (OAT). The OAT is given only in
 computerized format. For information on test dates, test sites, application procedure, etc., consult the Association of Schools and Colleges of
 Optometry web site at: http://opted.org.
- SCO does not state a minimum number of required observation hours, but they recommend at least 40 hours or more of observation time which should include 2 or more different optometry practices.
- For more information on the optometry program at Southern College of Optometry, visit their web site at: http://www.sco.edu.
- Degree requirements are revised frequently. This list is a summary based on the current DSU Bulletin. Consult the Bulletin for complete details on all requirements for graduation. You should follow the requirements stated in the issue of the Bulletin that was current for the semester you first enrolled at DSU. You may elect to follow a more recent Bulletin issue if you wish.
- IMPORTANT: Application to health professional schools is very competitive. Completion of the minimum requirements will not ensure admission. Admission decisions are based on policies established by the professional school's faculty and admission committee. Successful applicants typically have GPAs and other qualifications well in excess of stated minimums. Talk to your advisor for more information on what is realistically needed to have a good chance of getting into your desired professional school.

Biology: Pre-Optometry 2/22/2017 Page 2 of 2