

2023-2024 Catalog

Pre-Optometry

Track Academic Department Health Professions Advising Center

As part of a Pre-Health Track, you'll work with a dedicated Health Professions Advisory Committee (HPAC) advisor to plan your roadmap to a health professions school

Total Credits 49

Biology			
Must take in Order			
ltem #	Course Title		Credits
BIOL 1351	Introduction to Population Biology and Evolution	BIOL 1351 Corequisite: BIOL 1151	3
BIOL 1151	Introduction to Biology Practicum	BIOL 1151 Corequisite: BIOL 1351	1
BIOL 1352	Introduction to Cell and Molecular Biology	BIOL 1352 Corequisite: BIOL 1152	3
BIOL 1152	Basic Lab Techiques in Biology	BIOL 1152 Corequisite: BIOL 1352	1
BIOL 3321	Genetics	Prerequisites (with a grade of 'C' or better): BIOL 1351/1151, 1352/1152 and CHEM 1341/1141.	3
BIOL 3333	Microbiology	BIOL Upper-Division Prerequisite (with a 'C' or better): BIOL 3321	3
BIOL 3133	Microbiology Laboratory	BIOL Upper-Division Prerequisite (with a 'C' or better): BIOL 3321	1
(BIOL/CHEM 3334) Biochemistry			3

Chemistry

Must take in order:			
ltem #	Course Title		Credits
CHEM 1341	General Chemistry I	CHEM 1341 Corequisite: CHEM 1141	3
CHEM 1141	General Chemistry I Laboratory	CHEM 1141 Corequisite: CHEM 1341	1
CHEM 1342	General Chemistry II	CHEM 1342 Prerequisite (C or better): CHEM 1341/1141. Corequisite: CHEM 1142	3

CHEM 1142	General Chemistry II Laboratory	CHEM 1142 Corequisite: CHEM 1342	1
CHEM 2343	Organic Chemistry I	CHEM 2343 Prerequisite: CHEM 1342/1142; Corequisite: CHEM 2143.	3
CHEM 2143	Organic Chemistry I Laboratory	CHEM 2143 Corequisite: CHEM 2343	1

Physics		
Choose one pair of courses:		
ltem #	Course Title C	redits
General Physics I & II w/ lab		
University Physics I & II w/ Labs		

Mathematics			
ltem #	Course Title		Credits
MATH 1431	Calculus I	MATH 1431 Prerequisite: MATH 1430 or department consent.	4

Statistics		
Choose one of the fol	owing:	
ltem #	Course Title	Credits
MATH 3450	Biostatistics I	4

Psychology		
ltem #	Course Title	Credits
PSYC 1332	General Psychology	3

Additional Requirements: University of Houston College of Optometry

Note: Courses in this group not included in program total.

Advanced Anatomy and/or Advanced Physiology (higher than A&P I or II) are recommended. Acceptance of other advanced biology courses to satisfy prerequisite requirements is at the discretion of the admissions committee. It is recommended that applicants receive prior approval from the Program Manager for Admissions for applicable courses. Courses such as genetics, molecular biology, cell biology, neuroscience, anatomy, physiology, advanced human physiology, mammalian physiology, immunology, and endocrinology will be acceptable. Courses such as plant physiology, ecology, biodiversity, biotechnology will not be accepted.

Choose a combination of two to meet the additional 5 hours of advanced biology from the following:

ltem #	Course Title		Credits
BIOL 3339	Neuroscience	BIOL Upper-Division Prerequisite (with a 'C' or better): BIOL 3321	3

BIOL 3345	Physiology	BIOL 3345 Prerequisite (With Grade of 'C' or Better): BIOL 1351/1151, 1352/ 1152	3
BIOL 3351	Molecular Biology	BIOL 3351 Prerequisites (With Grade of 'C' or Better): BIOL 3321, CHEM 2343	3
BIOL 3461	Cell Biology	BIOL Upper-Division Prerequisite (with a 'C' or better): BIOL 3321	4
BIOL 4449	Immunology	BIOL Upper-Division Prerequisite (with a 'C' or better): BIOL 3321	4
BIOL 2445	Human Anatomy and Physiology I		4
BIOL 3448	Comparative Anatomy	BIOL Upper-Division Prerequisite (with a 'C' or better): BIOL 3321	4

Additional Requirements: University of the Incarnate Word College of Optometry

Note: Courses in this group not included in program total.

Recommended:

ltem #	Course Title		Credits
BIOL 2445	Human Anatomy and Physiology I		4
BIOL 3448	Comparative Anatomy	BIOL Upper-Division Prerequisite (with a 'C' or better): BIOL 3321	4
PHIL 2314	Ethics	PHIL 2314 Prerequisite: PHIL 1311 or 3317	3