2019-2020

B.A. or B.S. HEALTH SCIENCE - OPTOMETRY CONCENTRATION

GRACE CORE (39 credits; 2 APLs)
The Grace Core is designed around four essential relationships. Though all courses engage most relationships, courses are organized according to the relationship that is their primary focus.

**Satisfies B.S. Degree**
- MAT 3200  Probability and Statistics
- PHY 1100  Introduction to Psychology

**Satisfies B.A. Degree**
- FRE/SPA  Proficiency in Language & Culture
- GRE/HEB  French, Spanish, Greek, Hebrew

ADDITIONAL GENERAL EDUCATION--B.A. or B.S. DEGREE (6 credits)
- MAT 1230  Calculus I
- PHY 2140  College Physics I
- PHY 2150  College Physics I Lab (1 APL)
- PHY 2160  College Physics II
- PHY 2170  College Physics II Lab (1 APL)
- MAT 1230  Calculus I
- MAT 1240  Calculus I Lab (1 APL)

THE MAJOR (42 credits; 10 APLs)

**REQUIRED SCIENCE COURSES**
- BIO 1610  General Biology I
- BIO 1620  General Biology I Lab (1 APL)
- BIO 1710  General Biology II
- BIO 1720  General Biology II Lab (1 APL)
- BIO 2100  Health Sciences Seminar
- ENV 2110  General Ecology
- ENV 2120  General Ecology Lab (2 APL)
- @ BIO 3110  Cell and Molecular Biology
- @ BIO 3210  Advanced Anat & Phys I
- @ BIO 3220  Advanced Anat & Phys I lab (1 APL)
- @ BIO 4110  Microbiology
- @ BIO 4120  Microbiology Lab (1 APL)
- @ BIO 4210  Genetics
- @ BIO 4010  Senior Seminar (1 APL)

**REQUIRED MATHEMATICS/PHYSICAL SCIENCES**
- @ PHY 2140  College Physics I
- @ PHY 2150  College Physics I Lab (1 APL)
- @ PHY 2160  College Physics II
- @ PHY 2170  College Physics II Lab (1 APL)
- MAT 1230  Calculus I
- MAT 1240  Calculus I Lab (1 APL)

GRADUATION REQUIREMENTS
To receive a degree, each student must satisfy checksheet requirements, earn 120 credit hours, fulfill 12 credits of Applied Learning, have a 2.2 GPA in major courses, and a GPA of 2.0 overall. It is the student’s responsibility to work with his/her advisor and monitor progress toward these goals. Some majors and/or minors may have more stringent guidelines.

It is strongly encouraged that a minimum of 6 Applied Learning credits be earned in experiential education taking place outside the traditional classroom setting.

A CHEMISTRY MINOR IS REQUIRED WITH THIS CONCENTRATION
(adds 19 credits and 4 APL)
*In addition to 3 hours of math for BS degree, if chosen

CHECKSHEET TOTAL CREDITS: 81
CHECKSHEET TOTAL APL: 12
TOTAL CREDITS NEEDED TO GRADUATE: 120 (12 APLs)

† Indicates a course taught by a partner college/university.
@ Indicates a course with prerequisites. Please review catalog for prerequisites.