

**B. S. Biology
Biology Option
Catalog 2011-2012
(70 Hours)**

This program is designed to meet the needs of biology majors who may wish to pursue further education in graduate school in biology or professional schools in the health sciences. The sequence of courses conforms to entrance requirements prescribed in publications of the Association of American Medical Colleges, the American Association of Dental Schools, and the Council of Optometric Education of the American Optometric Association.

A major in the Biology Option can be declared after completing BIO 201 and BIO 202, or equivalent courses, with a grade of 'C' (2.00) or better in both courses, and completion of 24 semester hours of credit.

BIOLOGY CORE REQUIREMENTS (8 Hours)

___201 Principles of Biology: Cells (4 credit hours)

___202 Principles of Biology: Biodiversity (4 credit hours)

*******BIO 201 and 202 are the pre-requisite courses for biology courses numbered above 300*******

BIOLOGY REQUIREMENTS (13-17 Hours)

___335 Genetics lecture and lab (3, 1 credit hours each) pre-requisites: BIO 201 & 201

___366 Ecology lecture and lab (3, 1 credit hours each) pre-requisites: BIO 201 & 201

Courses that can satisfy the physiology requirement for the major are:

___240-241 Human Anatomy and Physiology lectures and labs (3, 1 credit hours each for 8 total hours) pre-requisite for BIO 240: BIO 201 and CHM 101; for BIO 241: BIO 240

___325 Molecular Biology of the Cell lecture and lab (3, 1 credit hours each) pre-requisites: BIO 201, 202 and CHM 211

___340 Plant Physiology (4 credit hours) pre-requisites: BIO 201, 202 and CHM 102

___345 Animal Physiology lecture and lab (3, 1 credit hours each) pre-requisites: BIO 201, 202 and CHM 102

___495 or 495L Seminar (1-3 credit hours) 3 hours limit. Pre-requisites: full BIO or MBY major; BIO 201, 202, 335, 366, and a physiology course

BIOLOGY ELECTIVES (19 Hours)

19 hours chosen from BIO courses numbered above 299. **No more than 10 hours from BIO 480, 491, 493, 498, and 499 can be counted towards the elective 19 hours.** >500 level courses may be chosen with permission of the instructor.

Biology elective suggestions and terms the course typically are taught but not guaranteed: (F=Fall, S=Spring)

BIO 315 (F, S); 316 (S, every odd year e.g. 2011); 320 (F); 325 (S); 415 (S); 425 (F, S); 459 (F, every odd year e.g. 2011); 465 (F); 485 (F, S).

COLLATERAL REQUIREMENTS (30 Hours minimum)

___ Chemistry 101 (4)

___ Chemistry 102 (4)

___ Chemistry 211 and CHML 211 (3) (1), prerequisite CHM 102

___ Chemistry 212 and CHML 212 (3) (1), prerequisite CHM 211/CHML 211, **or**

BIO 465 Biochemistry with lab (3) (1), prerequisite BIO 201, BIO 202 and CHM 211/CHML 211

___ Physics 101 (co-requisite MAT 111) OR 201 (co-requisite MAT 161) (4) (4)

___ Physics 102 (co-requisite MAT 111) OR 202 (co-requisite MAT 162) (4) (4)

___ Mathematics 151 or 161 (3)

___ Statistics 215 (3)

A "C" (2.00 GPA) or better average on Biology courses numbered above 299 is required for graduation.