

BIOMATH MAJOR AND PRE-MED STUDENTS

The Biomath major may be appropriate for a premed major, if you choose your electives to satisfy the requirements for medical school applications and the MCAT test.

There are *advantages to being a Biomath major*:

- to distinguish you from most other premed majors, and
- to prepare you for latter professional life, either as a doctor who practices medicine with patients, or as a doctor who also does research to improve the field of medicine.

See below a list of elective courses suggested for pre-med students.

If you have further questions about premed courses, it is suggested that you contact Dr. Bruce Babiarz who directs the Health Professions Office in Nelson Biolabs Building.

Important:

The courses and electives shown below are **suggestions** for pre-med students. Some of these courses are **NOT** currently accepted as options for the Biomath major. **To help navigate the list, we have marked in red which courses (as of Fall 2010 catalog) are required in the biomath majors, which courses are listed as electives, and which courses are not listed as electives. It is your responsibility to make sure to satisfy all the requirements of the biomath major, as listed in the catalog.**

Elective courses with concentration in Premed and Physiology

Possible sequence of courses. Alternatives available.

Address questions to Dr. B. Babiarz <babiarz@biology.rutgers.edu>

Freshman year (17 credits)

Fall

General Biology 01:119:101 (4 cr) **REQUIRED**

Fall

General Chemistry 01:160:161 (4 cr) or Honors 163 **REQUIRED**

Spr

General Biology 01:119:102 (4 cr) **REQUIRED**

Spr

General Chemistry 01:160:162 (4 cr) or Honors 164 **REQUIRED**

F or S Intro Exp (Gen Chem Lab) 01:160:171 (1 cr) **REQUIRED**

Sophomore year (13 credits)

Fall

Organic Chemistry 01:160:307 **IN LIST** (4 cr) or Honors 315 **IN LIST**
[required of medical school applicants]
Prerequisite General Chem 161 & 162

Spr

Organic Chemistry 01:160:308 **IN LIST** (4 cr) or Honors 316 **IN LIST**
[required of medical school applicants]
Prerequisite Organic Chem 307

F or S Organic Chemistry Lab 01:160:311 (2 cr) **NOT IN LIST**
[required of medical school applicants]
Prerequisite Organic Chem 307

Choose:

F or S Fund Cell & Devel Biol 01:146:270 (3 cr) **IN LIST**
Prerequisite General Biology 101 and 102

F or S Fund Neurobiology 01:146:245 (3 cr) **IN LIST**

Prerequisite General Biology 101 and 102

Junior year (13 credits)

F or S General Physics 01:750:203 (3 cr) **NOT IN LIST**

[required of medical school applicants]

Co-requisite Physics lab and calculus

F or S General Physics Lab 01:750:205 (1 cr) **NOT IN LIST**

[required of medical school applicants]

F or S General Physics 01:750:204 (3 cr) **NOT IN LIST**

[required of medical school applicants]

Prerequisite Physics 203

Co-requisite Physics lab and calculus

F or S General Physics Lab 01:750:206 (1 cr) **NOT IN LIST**

[required of medical school applicants]

Prerequisite Physics lab 205

F or S Genetics 01:447:380 (4 cr) **IN LIST**

[highly recommended for MCAT exam]

Prerequisites Gen Biol I & II, Gen Chem I & II & Lab

F or S Genetics Lab 01:447:382 (1 cr) **IN LIST**

Pre or Co-requisite Genetics 380

Senior year (choose 6 cr)

F or S Intro Biochem & Molec Biol 01:694:301 (3 cr) **IN LIST**

[highly recommended for MCAT exam]

Prerequisite Organic Chem

Spr

Systems Physiology 01:146:356 (3 cr) **IN LIST**

Prerequisite Gen Biol I & II, Gen Chem I & II & Lab

Fall

Cancer 01:447:495 (3 cr) **NOT IN LIST**
Prerequisite Genetics

Fall
Ad Cell Biol 01:146:470 (3 cr) **IN LIST**
Prerequisite Fund Cell & Develop Biol

Fall
Ad Neurobiol 01:146:445 (4 cr) **IN LIST**
Prerequisite Fund Neurobiol

Spr
Animal Histology 01:146:322 (4 cr includes lab) **NOT IN LIST**
Prerequisite Fund Cell & Develop Biol

Spr
Ad Develop Biol 01:146:472 (3 cr) **NOT IN LIST**
Prerequisite Fund Cell & Develop Biol

Spr
Immunology 01:146:474 (3 cr) **IN LIST**
Prerequisite General Biol I & II, Genetics

F or S General Microbiol 01:447:390 **IN LIST**
or 11:680:390 (4 cr includes lab) **NOT IN LIST**
Prerequisites Gen Biol I & II, Gen Chem I & II & Lab, Organic Chem I

Total Credits = 49 to satisfy medical school application requirements [**NOT A MAJOR REQUIREMENT ! Major requires, in addition to math courses, 4 elective courses plus lab plus bio & chem & intro experimentation.**]