

**COURSE SELECTION FOR A B.S. DEGREE IN BIOLOGY (BI)
WITH A CONCENTRATION IN MOLECULAR BIOLOGY (BIMB)**

<http://www.aum.edu/biology>

Advisors:

Freshman and sophomores should make an appointment with Sciences Central Advising 244-3592, Room 207, Goodwyn Hall.
Juniors and seniors should make an appointment with their biology advisor: <http://www.sciences.aum.edu/advising/biology>

READ THE ENTIRE SHEET ON BOTH SIDES TO BE AWARE OF SPECIFIC REQUIREMENTS FOR YOUR AREA

Freshman Year

ENGL 1010 English Comp. I*.....3	ENGL 1020 English Comp. II*.....3
CHEM 1100/1101 Gen. Chem./Lab4	CHEM 1200/1201 Gen. Chem./Lab.....4
BIOL 1010/1011 Prin. Biol. I/Lab*4	BIOL 1020/1021 Prin. Biol. II/Lab*4
MATH 1150 Pre-Cal Trig*.....3	MATH 1510 Survey Cal or 1610 Cal 1*.....3-4
UNIV 1000 University Success *..... 3	
.....1714-15

Sophomore Year

HIST or ENGL Core Sequence*.....3	HIST or ENGL Core Sequence*3
BIOL 2200/MATH 2200 Biostatistics3	BIOL 3300/3301 Genetics.....4
PHYS 2100/2101 Physics I.....4	PHYS 2200/2201 Physics II.....4
BIOL 3010/3011 Microbiology**4	ENGL Lit or HIST Core course as needed*.....3
.....14	COMM 1010 Comm or 2212 Public Speaking* .3
17

Junior Year

BIOL 4070/4701 Immunobiology (WI).....5	FINE ARTS Core*3
CHEM 3100/3101 Org. Chem. I/Lab.....4	CHEM 3200/3201 Org. Chem II/Lab.....4
BIOL Elective /Lab.....4	Area IV Core Elective*3
Area II or Area IV Core Course as needed *3	BIOL 4350/4351 Cell Biology4
.....1614

Senior Year

Elective4	BIOL 4952 Capstone (WI)3
BIOL Elective /Lab.....4	BIOL Elective3
BIOL Elective /Lab.....4	Electives3
CHEM 3300/3301 Biochem4	BIOL 4600/4601 Molecular Genetics (WI).....5
.....4	Area IV Core Elective*3
.....1617

Minimum Total Hours – 120

* University Core Courses and Math Core Course (Areas I, II, III, and IV):

See the back of this sheet for more information. You must complete the requirements in each area.

**Microbiology course information

Biology majors cannot receive Area V (major credit) for **both** BIOL 2010/2011 and BIOL 3010/3011. Do not schedule BIOL 3010/3011 without talking to your advisor if you have already taken a sophomore level Microbiology course.

Choose from the Following Biology Electives for 15 hours of electives in biology:

BIOL 3250 Epidemiology, BIOL 3100/3101 Forensics Biology, ***BIOL 4030/4031 Virology, BIOL 4100/4101 Developmental Biology, BIOL 4150/4151 Vertebrate Physiology, BIOL 4750/4751 Endocrinology, BIOL 4050/4051 Industrial Microbiology, BIOL 4060/4061 Environmental Microbiology, or BIOL 4800/4801 Perspectives in Biology. A maximum of 4 hours of BIOL 4932 Directed Research may count towards your Biology elective requirements. At least 3 courses must have a lab. Up to 8 credit hours of Marine Environmental Sciences Consortium courses (MESC, taught at Dauphin Island Sea Lab) or Organization of Tropical Studies courses (OTS, taught in Costa Rica or South Africa) may be substituted for no more than 8 credit hours of biology electives. If MESC or OTS courses are used for biology elective credit, the student may not use BIOL 4800, 4803 or 4932 for biology elective credit; MESC and OTS course offerings vary from semester to semester. Check with your advisor for any substitutions to these courses.

UNIVERSITY CORE CURRICULUM (Areas I, II, III, and IV)

See the current AUM Undergraduate Catalog for approved university (Areas I, II, III, and IV) core courses and the hours required in each of the four areas. Students must make a C or better in English Composition. Students must complete a 6-hour sequence in either literature or history. Students must take at least one course in history and one course in literature.

AREA I: Written Composition (6 Hrs of ENGL):	
ENGL 1010 English Comp. I (or Honors ENGL 1017)	ENGL 1020 English Comp. II (or Honors ENGL 1027)

AREA II: Humanities and Fine Arts (12 Hrs):	
LITERATURE (ENGL): Students Must take a 2 Literature sequence and 1 History or 1 Literature and a 2 History sequence. (See Area IV). Take at least 1 literature. If you want to take your sequence in literature instead of history choose from one of the two sequences below.	
ENGL 2530 Survey of Eng. Lit. I and ENGL 2540 Survey of Eng. Lit. II or ENGL 2570 Survey of Am. Lit. I and ENGL 2580 Survey of Am. Lit. II or INTL/ENGL 2600 Survey Lit. West. World I and INTL/ENGL 2610 Survey Lit. West. World II	
Fine Arts Appreciation: (1 required)	
MUSI 2110 Music Appreciation or THEA 2040 Theater Appreciation or VISU 1000 Art Appreciation or VISU 2030 Art History 1 or VISU 2040 Art History II or VISU 2600 Architecture Appreciation	
Communications (1 COMM course required):	
COMM 1010 Intro. Human Comm. or COMM 2212 Public Speaking	
Elective (1 course required if you took only 1 Literature):	
See the AUM Catalog for current approved Area II elective courses. This <u>must</u> be a course that is approved for Area II.	

AREA III: Natural Sciences and Mathematics (minimum of 14 hours required):	
Biology (2 lab courses required):	
BIOL1010 Prin I with BIOL1011 Prin I Lab and BIOL1020 Prin II with BIOL 1021 Prin II Lab	
MATH* (2 or more courses required): Specific course requirements vary with the biology concentration.	
*See explanation in below box about math requirements. The math course requirements are based upon both University and Major (Area V) requirements. MATH 1100 or MATH 1150 Precal. Trig. or MATH 1510 Survey Calc or MATH 1610 Cal I, and BIOL 2200/MATH 2200 Biostatistics	
*Explanation of Math Core Courses: Some biology concentrations such as BIHS and BIGN require Physics. Physics requires that you have either MATH 1510 Survey of Calculus or MATH 1610 Calculus I. You must either place into Calculus or take the prerequisite Math courses. You may take the highest level Math course that you are qualified to take. That is, if you can start with Cal I you do not have to take the lower level prerequisites for Cal I.	

AREA IV: History, Social and Behavioral Sciences (12 Hrs):	
HISTORY (HIST): Students Must take a 2 History sequence and 1 Literature or 1 History and a 2 Literature sequence. (See Area II). Take at least 1 history. If you want to take your sequence in history instead of literature choose from one of the two sequences below.	
HIST 1010 World Hist. I and HIST 1020 World Hist. II or HIST 2010 U.S. Hist. I and HIST 2020 U.S. Hist. II or HIST 1060 Western Civilization I and HIST 1070 Western Civilization II.	
Electives: If you take a 2 history course sequence you need 2 electives. If you take 1 history you need 3 electives.	
See the AUM Catalog for current approved Area IV elective courses.	

Additional Information:

Do not wait until the last minute to seek advising and your pin numbers. Be aware of important dates. Be sure and obtain an official AUM student email account, check it daily, and clear out old email so that you can continue to receive email. Note that 1000 level courses are freshman level, 2000 are sophomore level, 3000 are junior level, and 4000 are senior level.

You need to plan your elective courses based on your interests and future career plans.