

# B.S. IN ENVIRONMENTAL SCIENCE (EBIO)

## Environmental Biology Track

<b>Freshman Year</b>	
ENGL 1010 English Comp. I ..... 3	ENGL 1020 English Comp. II ..... 3
CHEM 1100/1101 Gen. Chem.I/Lab ..... 4	CHEM 1200/1201 Gen. ChemII/Lab ..... 4
BIOL 1010/1011 Prin. Biol. I/Lab..... 4	BIOL 1020/1021 Prin. Biol. II/Lab ..... 4
ENSC 1000 Intro to Envi Sci..... 1	COMM 1010 Intro. Hum. Comm. .... 3
UNIV 1000 University Success .....3	Fine Arts Core ..... 3
.....15	..... 17
<b>Sophomore Year</b>	
BIOL 3010/3011 Microbiology ..... 4	Area IV Core Elective ..... 3
CHEM 2300/01 or 3100/01 Organic Chem..... 4	PSCI 1300/1301 Intro Earth Sci ..... 4
BIOL 2030/2031 Zoology ..... 4	BIOL 2020/2021 Botany ..... 4
MATH core ..... 3	Area IV Core Elective ..... 3
.....15	..... 14
<b>Junior Year</b>	
HIST or ENGL Core Sequence ..... 3	HIST or ENGL Core Sequence ..... 3
BIOL 4200/4201 WI Ecology ..... 5	Area II or Area IV Core Elective..... 3
HIST or ENGL Core as needed ..... 3	GEOG 3950 Intro GIS/Lab ..... 4
BIOL 2200/MATH 2200 Biostatistics..... 3	Writing Intensive (WI) course/Elective... 4 or 5
.....14	..... 14-15
<b>Senior Year</b>	
BIOL 3300/3301 Genetics..... 4	ENSC 4952 WI Capstone in Envi Sci ..... 3
BIOL Elective/Lab ..... 4	BIOL Elective/Lab ..... 4
BIOL 4230/4231 Envi. Pollution & Control..... 4	CHEM Elective/Lab ..... 4
BIOL Elective /Lab ..... 4	BIOL 4240 Ecosystems ..... 3
ENSC 2952 Envi Sci Seminar ..... 1	BIOL Elective..... 3
.....17	..... 17

### Minimum Total Hours – 123

#### University Core Courses (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.

#### Math Core Course: Choose from one of the following

MATH 1100 Finite Math, or MATH 1210 Pre-Cal Algebra, or MATH 1510 Survey of Cal or MATH 1610 Cal I.

#### Choose from the Following Biology Electives – Must have 3 with Lab

BIOL 3400 Principles of Toxicology, BIOL 3800 Topics in Ecological Economics, BIOL 4060/4601 Environmental Microbiology, BIOL 4210 Population Ecology, BIOL 4500/4501 Freshwater Biology, BIOL 4520/4521 Wetlands, BIOL 4530/4531 Conservation Biology, BIOL 4540/4541 Field Botany, BIOL 4660/4661 Field Zoology, BIOL 4760 Evolutionary Biology, BIOL 4800/4801 Perspectives in Biology, or BIOL 4932 Directed Research.

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.

#### Choose from the Following Chemistry Electives

CHEM 2103 Quantitative Analysis (WI) with lab, CHEM 3200/3201 Organic Chemistry II, CHEM 4303 Instrumental Analysis, or CHEM 3500/3501 Environmental Chemistry.

**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):	
<b>ENGL 1010 English Comp. I</b> <i>(or Honors ENGL 1017)</i>	<b>ENGL 1020 English Comp. II</b> <i>(or Honors ENGL 1027)</i>

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.	
<b>ENGL 2530 Survey of Eng. Lit. I and ENGL 2540 Survey of Eng. Lit. II</b> <i>or ENGL 2570 Survey of Am. Lit. I and ENGL 2580 Survey of Am. Lit. II</i> <i>or INTL/ENGL 2600 Survey Lit. West. World I and INTL/ENGL 2610 Survey Lit. West. World II</i>	
Fine Arts Appreciation: (1 required)	
<b>MUSI 2110 Music Appreciation or THEA 2040 Theater Appreciation or VISU 1000 Art Appreciation</b> <i>or VISU 2030 Art History I or VISU 2040 Art History II or VISU 2600 Architecture Appreciation</i>	
Communications (1 COMM course required):	
<b>COMM 1010 Intro. Human Comm. or COMM 2212 Public Speaking</b>	
Elective (1 course required if you took only 1 Literature):	
<b>See the AUM Catalog for current approved Area II elective courses. This <u>must</u> be a course that is approved for Area II.</b>	

AREA III: Natural Sciences and Mathematics (minimum of 14 hours required):	
Biology (2 lab courses required):	
<b>BIOL1010 Prin I with BIOL1011 Prin I Lab and BIOL1020 Prin II with BIOL 1021 Prin II Lab</b>	
MATH* (2 or more courses required): Specific course requirements vary with the biology concentration.	
<p><b>*See explanation in below box about math requirements.</b>  <b>The math course requirements are based upon both University and Major (Area V) requirements.</b>  <b>MATH 1100 or MATH 1150 Precal. Trig. or MATH 1510 Survey Calc or MATH 1610 Cal I, and</b>  <b>BIOL 2200/MATH 2200 Biostatistics</b></p>	
<b>*Explanation of Math Core Courses:</b>	
<p><b>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.</b></p>	

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.	
<b>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</b> <i>or HIST 1060 Western Civilization I and HIST 1070 Western Civilization II.</i>	
Electives: If you take a 2 history course sequence you need 2 electives. If you take 1 history you need 3 electives.	
<b>See the AUM Catalog for current approved Area IV elective courses.</b>	

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. Students wishing to pursue Graduate School should note that most schools require Calculus and two semesters of Physics as well as two semesters of Organic Chemistry.**