

**College of Basic and Applied Sciences  
2007-2009 Upper Division Form**

Student name \_\_\_\_\_ Student # \_\_\_\_\_  
 Major Biology Minor \_\_\_\_\_  
 Concentration \_\_\_\_\_ E-mail \_\_\_\_\_

Instructions: For students graduating in Fall 2007 or later. *One (1) copy signed by major and minor advisors should be filed in the Records Office three semesters before anticipated graduation. An Intent to Graduate form should also be filed in the Records Office at the time of Upper Division Form submission.*

General Studies Area	Course	Semester	Grade	Notes	Credit Hours
COMMUNICATION (9 hours)	ENGL 1010				3
	ENGL 1020				3
	COMM 2200				3
HISTORY (6 hours) Choose two: HIST 2010, HIST 2020, HIST 2030					3
					3
HUMANITIES AND/OR FINE ARTS (9 hours) Choose one: ENGL 2020, 2030, or HUM 2610. Choose two with different prefixes: ANTH 2210, ART 1030, 1910, 1920, DANC 1000, HIST 1010, 1020, 1110, 1120, MUS 1030, PHIL 1030, THEA 1030					3
					3
					3
MATHEMATICS (3 hours)*	MATH 1910				3 of 4*
NATURAL SCIENCES (8 hours)	BIOL 1110 & 1111			Course is also considered part of the major, making a minimum of 40 credits of BIOL courses.	4
	CHEM 1110 & 1111				4
SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose two (different rubrics): AAS 2100, ANTH 2010, EMC/JOUR/RIM 1020, ECON 2410, GEOG 2000, HLTH 1530/1531, PS 1010, PS 2010, PSY 1410, SOC 1010, 2010, WMST 2100					3
					3
<b>Hours Required</b>					<b>41</b>

\* If a 4 credit Math course is taken, 3 credits count in General Education and the extra credit counts as Supporting and Elective Courses.

Major Courses	Course	Semester	Grade	Notes	Credit Hours
General Biology 1110 (credits counted above)	BIOL 1110/1111				(4)
General Biology	BIOL 1120/1121				4
Microbiology	BIOL 2230/2231				
Genetics	BIOL 3250/3251				4
Intro. Biol. Literature	BIOL 3230				2
Biology Concentration Courses (see listing)					4
Biology Concentration Courses (see listing)					3
Biology Concentration Courses (see listing)					3
Biology Upper Division Elective (3000/4000)- See Advisor					4
Physiology (select from BIOL 4110 & 4111, or 4210 & 4211, or 4500 & 4501)					4
General Ecology	BIOL 4240/4241				4
<b>Hours Required</b>					<b>36 (40)</b>

Supporting and Elective Courses					
Course	Semester	Grade	Notes	Credit Hours	

CHEM 1120 & 1121				4
CHEM 2030 & 2031 or 3010 & 3011				4
MATH 1920, or MATH 2050, or BIOL 4350 & 4351				3-4
Elective if Math 2050 is chosen				0-1
Math 1910 (remaining 1 credit from general education)				1
Electives				12
<b>Hours Required</b>				<b>25</b>

Minor				
Course	Semester	Grade	Notes	Credit Hours
<b>Hours Required</b>				<b>18</b>
<b>Signed:</b>				
	<b>Minor Advisor</b>			<b>Date</b>

Optional 2 <sup>nd</sup> Minor				
Course	Semester	Grade	Notes	Credit Hours
<b>Hours Required</b>				
<b>Signed:</b>				
	<b>Minor Advisor</b>			<b>Date</b>

1. Degrees require a minimum of 120 semester hours (12 of the last 18 at MTSU) with a 2.0 GPA, a minimum of 42 upper-division hours (30 at MTSU) with a 2.0 GPA, and minimum of 60 senior college hours.
2. Remedial/developmental courses do not count toward the 120-hour requirement or cumulative degree GPA.
3. Courses used to fulfill high school deficiencies can only be counted as general elective credit.

<b>Signed:</b>			
	<b>Major Advisor</b>		
	<b>Date</b>		

## Instructions For Upper-Division Forms for Biology

1. This form should be filled out in consultation with your advisor during the second semester of the sophomore year.
2. This form becomes an Application for admission to Upper Division and/or Change of Major Form when one copy is completed, signed by the appropriate advisors, and submitted to the Records Office (Cope 102).
3. In order to graduate, you must complete at least 120 semester hours of which at least 42 must be in upper division (3000+ numbered) courses. At least 60 semester hours must have been taken at a senior (4 year) college/university. A minimum 2.00 GPA in the major, overall, in at least 42 hrs of upper division (3000+ level) courses, and in most minors, is required for graduation. Course work awarded from a junior college will not count as upper-division credit even if it is credited on your transcript as a 3000 or 4000 level course. At least one minor is required; a natural science such as chemistry is recommended.
4. If the course prefix and number are not shown, be sure to write them in the "Course" column. In the "Grade" column, write the grade that you received if you have already completed the course, or the semester that you plan on taking the course (for example, F'04, Sp'05, or Su'06). In the Notes column, write in the course you are taking instead of the course listed, or Advanced Placement credit for the course, or transfer credit for the course, (in which case you should list the original course name and number); otherwise, the Notes column should remain blank. See advisor and catalog for options to fulfill specific requirements.
5. See the specified MTSU Undergraduate Catalog and the Student Handbook for further details concerning degree requirements for graduation. You are responsible for understanding and fulfilling all degree requirements.

<b>Biology Concentration Lists*</b>	
<p><b>Animal Biology*</b> Choose 10 hrs. from the following list.</p> <p>3010 (4) Embryology (Fall) 3020 (4) Comp. Anat. Vert. (Fall) 3040 (4) Entomology (Fall) 3050 (3) Parasitology (Spring) 4130 (4) Histology (Spring) 4140 (4) Invert. Zool. (Fall) 4180 (4) Vert. Zool. (Fall) 4220 (4) Ichthyology (Fall) 4390 (4) Ethology (Spring, alt. yr.) 4580 (4) Marine Biology (Spring) 4720 (4) Animal Development (Spring)</p>	<p><b>Microbiology*</b> Choose 10 hrs. from the following list</p> <p>3050 (3) Parasitology (Spring) 3210 (3) Environ. Micro. (Spring) 4080 (4) Mycology (Fall) 4300 (4) Immunology (Fall &amp; Spring) 4430 (4) Diagnostic Micro. (Spring) 4440 (4) Gen. Virology (Fall) 4450 (4) Molec. Genet. (Fall) 4510 (4) Food/Indust. Micro. (Fall) 4550 (3) Biotechnology (Fall &amp; Spring) 4730 (4) Microbial Phys. &amp; Biochem. (Spring)</p>
<p><b>Genetics &amp; Biotechnology*</b> <i>Required:</i> 4550 (3) Biotechnology (Fall &amp; Spring) <i>Pick one of the following:</i> 4450 (4) Molecular Genetics (Fall) 4460 (3) Human Genetics (Spring) <i>Pick one of the following:</i> 4270 (4) Trans. Elec. Microscopy (Spring) 4290 (4) Scan. Elec. Microscopy (Fall) 4300 (4) Immunology (Fall &amp; Spring) 4450 (4) Molecular Genetics (Fall) 4460 (3) Human Genetics (Spring) 4510 (4) Food/Indust. Micro. (Fall) 4570 (3) Prin. Toxicology (Fall) 4720 (4) Animal Development (Spring)</p>	<p><b>Physiology*</b> Choose 10 hrs. from the following list</p> <p>3010 (4) Embryology (Fall) 3020 (4) Comp. Anat. Vert. (Fall) 4110 (4) Gen. Physiology (Fall &amp; Spring)+ 4130 (4) Histology (Spring) 4170 (3) Endocrinology (Fall) 4210 (4) Cell &amp; Molec. (Fall &amp; Spring)+ 4300 (4) Immunology (Fall &amp; Spring) 4440 (4) Gen. Virology (Fall) 4500 (4) Plant Physiology (Spring)+ 4520 (4) Plant Anatomy (Spring) 4560 (4) Neurobiology (Fall) 4570 (3) Prin. Toxicology (Fall) <i>+only if not used for core requirement</i></p>
<p><b>Plant Biology*</b> Choose 10 hrs. from the following list</p> <p>3030 (4) Non -Flower. Plants (Fall) 4060 (3) Dendrology (Fall) 4080 (4) Mycology (Fall) 4120 (4) Flower. Plants (Spring) 4520 (4) Plant Anatomy (Spring)</p>	<p><b>General Biology*</b> From each of the following 3 lists, choose 1 course.</p> <p>Vertebrate: 3010 or 3020 or 4180 Botany: 3030 or 4080 or 4120 Other: 3040 or 3050 or 4130 or 4140</p>
<p><b>*See advisor or chair for additional options; other Upper Division Biology courses may be substituted.</b></p>	