

College of Basic and Applied Sciences Upper Division Form 2011-2012 Catalog

Student name _____ Student # _____
 Major Physics Minor _____ (Optional)
 Concentration Physics Teaching E-mail _____

Instructions: For students graduating in Fall 2011 or later, *one (1) copy signed by major and minor advisors should be filed in Jones Hall, room 115 three (3) semesters prior to graduation. An Intent to Graduate form should be submitted with this form.*

General Education 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	HIST _____				3
	HIST _____				3
HUMANITIES AND/OR FINE ARTS (9 hours) Choose <u>one</u> : ENGL 2020, 2030 or HUM 2610. Choose <u>two</u> 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) <i>Calculus I</i>	MATH 1910			Fourth credit counts in <i>Supporting and Elective Courses</i>	3 of 4
NATURAL SCIENCES (8 hours) Take CHEM 1110/1111 (4 cr.). Take either PHYS 2010 (0 cr.) and PHYS 2011 (4 cr.) <u>or</u> PHYS 2110 (3 cr.) and PHYS 2111 (1 cr.)	CHEM 1110/1111				4
	PHYS _____ PHYS _____			Also counts toward <i>Major Courses</i> (see below)	4
SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose two (different rubrics): AAS 2100, ANTH 2010, ECON 2410, EMC/JOUR/RIM 1020, GEOG 2000, GS 2010, HLTH 1530/1531, PS 1010, PS 1005, PSY 1410, SOC 1010, WGST 2100					3
					3
Total:					41

Major Core (included in major GPA)	Course	Semester	Grade	Notes	Credit Hours
Introductory Physics I <i>PHYS 2010/2011 or PHYS 2110/2111</i>	PHYS _____ PHYS _____			Four credits already counted under General Education/Natural Sciences	0 of 4
Introductory Physics II <i>PHYS 2020/2021 or PHYS 2120/2121</i>	PHYS _____ PHYS _____				4
Modern Physics I <i>PHYS 3100 or PHYS 3070</i>	PHYS _____				3
Modern Physics II <i>PHYS 3110 or PHYS 3080</i>	PHYS _____				3
Modern Physics Lab	PHYS 3111				1
Thermodynamics <i>PHYS 3610 or PHYS 3510</i>	PHYS _____				3
Physics Seminar	PHYS 3800				1
Physics Practicum	PHYS 3900				1
Research (<i>PHYS or ASTR</i>)	____ 4850				2
Senior Thesis (<i>PHYS or ASTR</i>)	____ 4900				2
Total:					20

Major/concentration requirements are continued on the next page.

Concentration (included in major GPA)	Course	Semester	Grade	Notes	Credit Hours
Teaching of Physics	PHYS 3930				3
Physics Licensure	PHYS 3950				1
Exploring the Universe	ASTR 1030				3
31 hours in major GPA, including Physics I					Total: 7

Supporting (excluded from major GPA)	Course	Semester	Grade	Notes	Credit Hours
Calculus I	MATH 1910			Fourth credit hour from <i>General Education/Mathematics</i> listing	1
Calculus II	MATH 1920				4
Probability and Statistics	MATH 2050				3
Differential Equations or Theoretical Physics I	MATH 3120 or PHYS 3150				3
General Chemistry II	CHEM 1120 or CHEM 1121				4
General Biology I	BIOL 1110 or BIOL 1111				4
Total:					19

Note: Students must additionally take Elective and/or Minor courses totaling 33 hr, of which at least 19hr must be upper division.

Minor (Minor is Optional)	Course	Semester	Grade	Notes	Credit Hours
<i>* Students seeking a license to teach physics in secondary schools must complete a minor in Secondary Education.</i>					
Step 1: Inquiry Approaches to Teaching	MSE 1010				1
Step 2: Inquiry-Based Lesson Design	MSE 2010				1
Knowing and Learning	YOED 3520				3
Classroom Interactions	YOED 3550				3
Perspectives in Science and Mathematics	PHIL 3120				3
Research Methods	PHYS 4740				3
Project-Based Instruction	YOED 4050				3
Apprentice Teaching (1)					4
Apprentice Teaching (2)					12
Total:					33

Signed:		
	Minor Advisor (if applicable)	Date

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 a minimum of 60 senior college hours.
2. Learning Support courses do not count toward the 120-hour requirement or cumulative degree GPA.

Signed:		
	Physics Advisor	Date

Local Address: _____ Phone: _____

