## College of Basic and Applied Sciences Upper Division Form 2019-2020 Catalog

Student name		Student #	
Major	MATHEMATICS	Minor	Secondary Education (MTeach)
Concentration	MATHEMATICS EDUCATION	E-mail	

Instructions: For students graduating in Summer 2019 or later. One (1) copy signed by major and minor advisors should be filed in DSB 120 three semesters before anticipated graduation. The Intent to Graduate form should also be filed in DSB 120 at the time of Upper Division Form submission.

General Education	Course	Semester	Grade	Prerequisites/Notes	Credit Hours
	ENGL 1010			Must earn a grade of C- or better	3
COMMUNICATION (9 hours)	ENGL 1020			Must earn a grade of C- or better	3
	COMM 2200				3
HISTORY (6 hours)					3
Choose two: HIST 2010, HIST 2020, HIST 2030					3
HUMANITIES AND/OR FINE ARTS (9 hours)					3
Choose one: ENGL 2020, 2030, HUM 2610. Choose two (different rubrics): ANTH 2210, ART 1030 or 1920, DANC 1000, HIST 1010,					3
1020, 1110, 1120, MUS 1030, PHIL 1030, THEA 1030					3
<b>MATHEMATICS</b> (3 hours) Choose one: MATH 1010, 1530, 1630, 1710,1720, 1730, 1810, <b>1910</b>	MATH 1910			Pre-req: MATH 1730 with a C(2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score; must earn a grade of C(2.0) or higher	3 (+1)
NATURAL SCIENCES (8 hours) Choose two different subjects: ASTR 1030/1031, BIOL 1030/1031, BIOL 1110/1111,BIOL 2010/2011,BIOL 2020/2021, CHEM 1010/1011,					4
CHEM 1030/1031,CHEM 1110/1111, GEOL 1030/1031,GEOL 1040/1041, PGEO 1030, PHYS 1110, PHYS 2010/2011, PHYS 2110/2111 PSCI 1030/1031, PSCI 1130/1131					4
SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose two different subjects: AAS 2100, ANTH 2010, ECON 2410, ECON 2420, GEOG 2000,GS 2010, HLTH 1530/1531,					3
EMC/JOUR/RIM 1020, PS 1010, PS 1005, PSY 1410, RS 2030, SOC 1010, SOC 2010, WGST 2100					3
				Hours Required	41

Major Courses - Grade of C (2.0) or higher required for Major Courses; 2.75 GPA pre-requisite for Directed Teaching	Course	Semester	Grade	Prerequisites/Notes	Credit Hours
Calculus I	MATH 1910			Pre-req: MATH 1730 with a C(2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score. 3 hours counted in Gen. Ed. All 4 hours are also considered part of the major.	1 (+3)
Calculus II	MATH 1920			MATH 1910 with a grade of C (2.0) or higher	4
Elements of Linear Algebra	MATH 2010			MATH 1910	3
MATH 2050 Probability and Statistics <u>or STAT 3150 Math Statistics</u> (STAT 3150 is offered in the Fall only)				MATH 2050: MATH 1910 STAT 3150: MATH 1920	3
College Geometry (Spring only)	MATH 3070			MATH 3460	3
Calculus III	MATH 3110			MATH 1920	4
Foundations of Higher Math	MATH 3460			MATH 1920	3
Abstract Algebra I	MATH 4510			MATH 3460	3
History and Philosophy of Mathematics (Fall only)	MATH 4620			MATH 3460	3
Seminar in Mathematics	MATH 4990			Should be taken in the semester before Residency II	3
MATH elective	MATH			See advisor; See online catalog for prerequisites	3
Hours Required					

Supporting Courses - Grade of C (2.0) or higher required for supporting courses						
Course	Semester	Grade	ade Prerequisites/Notes			
MATH 1910 – Calculus I			Credits counted in general education	0		
COMM 2200 – Fundamentals of Communication			Credits counted in general education	0		
MATH 3320 - Teaching Mathematics in Middle Grades (Spring only)			Admission to teacher education program	3		
MATH 3330 - Teaching Mathematics in Secondary Grades (Fall only)			Admission to teacher education program, completion of math core, and MATH 3320	3		
MATH 4540 - Topics in Secondary School Mathematics (Spring only)			Admission to teacher education program and completion of mathematics core	3		
MATH 4740 - Research Methods			YOED 3520	3		
CSCI 1170 – Computer Science I			MATH 1730 with a C (2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score.	4		
Hours Required						

Minor – Secondary Education (see minor advisor for any questions regarding prerequisites)						
Course	Semester	Grade	Notes	Credit Hours		
MSE 1010 - Step 1 Inquiry Approaches				1		
MSE 2010 - Step 2 Inquiry Lesson Design				1		
YOED 3520 - Knowing and Learning in Science and Mathematics				3		
YOED 3550 - Classroom Interactions in Science and Mathematics				3		
YOED 4050 - Project-Based Instruction in Science and Mathematics				3		
PHIL 3120 - Perspectives on Science and Math (Spring only)			SEE ADVISOR - take MATH 3340 (spring only) in Pre-req: MATH 1530, 2050, or 3150 with a C (2.0)			
YOED 4040 - Residency I MTeach				4		
YOED 4400 - Residency II			12			
				30		
Signed:						
	Minor Advisor					

<sup>1.</sup> 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.

Signed:		
	Major Advisor	Date

<sup>2.</sup> Learning Support courses count toward the 120-hour requirement and the overall GPA.