

**College of Basic and Applied Sciences  
Upper Division Form 2018-2019 Catalog**

Student name \_\_\_\_\_ Student # \_\_\_\_\_  
 Major Chemistry Minor Secondary Education - MTeach  
 Concentration Teacher Licensure E-mail \_\_\_\_\_

**Instructions: For students graduating in Fall 2018 or later. One (1) copy signed by major and minor advisors should be filed in DSB 120 with the Graduation Analyst three semesters prior to graduation. An Intent to Graduate form must be filed with the Upper Division form.**

General Education	Course	Semester	Grade	Notes	Credit Hours
<b>COMMUNICATION</b> (9 hours)	ENGL 1010				3
	ENGL 1020				3
	COMM 2200				3
<b>HISTORY</b> (6 hours) Choose two: HIST 2010, HIST 2020, HIST 2030					3
					3
<b>HUMANITIES AND/OR FINE ARTS</b> (9 hours) Choose one: ENGL 2020 or 2030 or HUM 2610 Choose two (different rubrics): ANTH 2210, ART 1030, ART1920, DANC 1000, HIST 1010, HIST 1020, HIST 1110, HIST 1120, MUS 1030, PHIL 1030, THEA 1030					3
					3
					3
<b>MATHEMATICS</b> (3 hours) *	MATH 1910			Preq: MATH 1730 with a minimum grade of C or Math ACT score of 26.	3 of 4 *
<b>NATURAL SCIENCES</b> (8 hours)	BIOL 1110/1111			Preq: MATH 1710 with C- or better or MATH ACT of 19 or higher	4
	CHEM 1110/1111			Course is also considered part of the major, making a total of 36 credits of CHEM courses.	4
<b>SOCIAL/BEHAVIORAL SCIENCES</b> (6 hours) Choose two (different rubrics): AAS 2100, ANTH 2010, EMC/JOUR/RIM/1020, ECON 2410, ECON 2420, GEOG 2000, GS 2010, HLTH 1530, PS 1010, PS 1005, PSY 1410, RS 2030, SOC 1010, SOC 2010, WGST 2100					3
					3
<b>Hours Required</b>					41

Major Courses (2.0 GPA required) (2.5 GPA pre-requisite for Directed Teaching)	Course	Semester	Grade	Notes	Credit Hours
General Chemistry I	CHEM 1110/1111			Credits counted in General Education	(4)
General Chemistry II	CHEM 1120/1121			Preq: CHEM 1110/1111 with a C-	4
Quantitative Analysis	CHEM 2230			Preq: CHEM 1120/1121 with grade of C-	3
Quantitative Analysis Lab	CHEM 2231			Preq: CHEM 1120/1121 with grade of C- or better. Coreq: CHEM 2230 recommended	2
Organic Chemistry I	CHEM 3010/3011			Preq: CHEM 1120/1121 or equivalent	4
Organic Chemistry II	CHEM 3020/3021			Preq: CHEM 3010/3011	4
Principles of Biochemistry (3530/3531) or Biochemistry (4500)	CHEM ____			Preq for CHEM 3530/3531 is CHEM 3010/3011. Preq for CHEM 4500 is CHEM 3020/3021	3-4
Physical Chemistry Fundamentals I (CHEM 4330/4331) and II (CHEM 4340/4341) or Physical Chemistry I (CHEM 4350/44351) and II (4360/4361)	CHEM ____			Preq for CHEM 4330/4331 is MATH 1910 and PHYS 2020/2021.	8
	CHEM ____			Preq for CHEM 4350/4351 is CHEM 2230/2231; MATH 1920, and PHYS 2020/2021.	
Research Methods	CHEM 4740			Preq: YOED 3520	3
3-4 hours of Chemistry Electives chosen from: CHEM 4000, 4100, 4230/4231, 4400, 4510, 4530, 4600, 4610, 4700, 4780, PSCI 4080 (must choose 4 credits total if CHEM 4500 is taken above)					4-3
<b>Hours Required</b>					35 (39)

Supporting Courses				
Course	Semester	Grade	Notes	Credit Hours
PSCI 1030/1031 Topics in Physical Science				4
BIOL 1120/1121 General Biology II			Preq: BIOL 1110/1111	4
MATH 1910 Calculus I			Preq: MATH 1730 with a C or better	1 of 4
PHYS 2010/2011 Non-Calculus Based Physics I and Laboratory			Preq: MATH 1710 w/minimum grade of C or MATH 1730	4
PHYS 2020/2021 Non-Calculus Based Physics II and Laboratory			Preq: PHYS 2010/2011	4
CHEM 3890 Chemistry Instruction Internship			Preq: Successful completion of target courses and permission of instructor	1
Hours Required				18

Secondary Education Minor (MTeach)				
Course	Semester	Grade	Notes	Credit Hours
MSE 1010 Inquiry Approaches to Teaching				1
MSE 2010 Inquiry Lesson Design			Preq: MSE 1010	1
YOED 3520 Knowing and Learning			Preq: MSE 1010 and MSE 2010	3
YOED 3550 Classroom Interactions			Preq: YOED 3520	3
PHIL 3120 Perspectives on Science and Math				3
YOED 4050 Project Based Instruction			Preq: Admission to MTeach	3
YOED 4040 Residency I			Preq: Admission to MTeach; YOED 3520 and YOED 3550	4
YOED 4400 Residency II			Preq: YOED 4040	12
Hours Required				30
Signed:				
	Minor Advisor			Date

Optional 2 <sup>nd</sup> Minor				
Course	Semester	Grade	Notes	Credit Hours
Hours Required				
Signed:				
	Minor Advisor			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. Remedial courses do not count toward the 120-hour requirement or cumulative degree GPA.

Signed:			
	Major Advisor		
	Date		