

COLLEGE OF ARTS AND SCIENCES

Bachelor of Science in Mathematics (for Teacher Certification)

The Bachelor of Science in Mathematics with an emphasis in teacher certification is intended for those who want to teach mathematics at the high school level. Additionally, this degree prepares students for careers in business, industry, government, and all math intensive fields. The degree also prepares students for graduate studies in the mathematical sciences.

Recommended 4-Year Curriculum

College Algebra Ready Students (but not Calculus I ready)

FRESHMAN YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
¹ MATH	1314	College Algebra	3	MATH	2413	Calculus I	4
MATH	1316	Trigonometry	3	MATH	2113	Calculus I Lab	1
² _____	_____	Fine and Performing Arts	3	ENGL	1302	English Composition II	3
ENGL	1301	English Composition I	3	³ COSC	1336	Fundamentals of Programming	4
POLS	2305	Introductory American Govt.	<u>3</u>	HIST	1301	U.S. History I	3
				⁴ _____	_____	Social/Behavioral Science	<u>3</u>
		Total Semester Hours	15			Total Semester Hours	18

SOPHOMORE YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
MATH	2414	Calculus II	4	MATH	3404	Multivariate Calculus	4
MATH	2114	Calculus II Lab	1	MATH	3104	Multivariate Calculus Lab	1
⁵ ENGL	_____	World/European Lit.	3	MATH	3425	Foundations of Mathematics	4
HIST	1302	U.S. History II	3	MATH	3202	Matrix Methods in Sci/Eng	2
⁶ _____	_____	Lab Science I	4	⁶ _____	_____	Lab Science II	4
_____	_____	General Elective	<u>2</u>	⁷ SPCM	1315	Fundamentals of Speech	<u>3</u>
		Total Semester Hours	17			Total Semester Hours	18

JUNIOR YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
MATH	3345	Introduction to Analysis	3	MATH	3380	Algorithms in Applied Math	3
MATH	4350	Theory of Probability	3	MATH	3336	Introduction to Abstract Algebra	3
MATH	3305	Ordinary Differential Equations	3	MATH	3365	Geometric Systems	3
EDUC	3310	School in the Social Setting	3	EDSP	3351	Managing & Inst. Div. Learners	3
EPSY	3340	Educ. Psyc – Adol. Development	<u>3</u>	EDUC	4320	Teaching Skills	<u>3</u>
		Total Semester Hours	15			Total Semester Hours	15

SENIOR YEAR

First Semester			Credit Hours	Second Semester			Credit Hours
MATH	4160	Senior Seminar	1	EDUC	4057	Student Teaching Seminar	0
MATH	_____	Upper Level Math Elective	3	EDUC	4640	Student Teaching	<u>6</u>
MATH	_____	Upper Level Math Elective	3				
EDFB	4338	Literacy in the Content Areas	3				
EDFB	4313	Teaching Mathematics	3				
POLS	2306	Introductory Texas Politics	<u>3</u>				
		Total Semester Hours	16			Total Semester Hours	6

+ Consult with your advisor for additional information on degree requirements and schedule planning.

Total hours must equal at least 120 hours.

(Some elective or core curriculum courses may need to be taken during the summer to complete the degree in four years.)

NOTES:

¹ MATH 1314 – College Algebra is recommended, but not required, for all students prior to taking Calculus. It will count as a general elective.

² Choose **Fine and Performing Arts** elective from MUSI 1306, MUSI 2301, THTR 1301, THTR 1356, ART 1301, ART 2303, ART 2304

³ COSC 1336/1136 is needed as a prerequisite for MATH 3380. It counts as a general elective.

⁴ Choose **Social and Behavioral Sciences** elective from ANTH 2346, ECON 1301, ECON 2301, ECON 2302, GEOG 1313, HIST 2321, HIST 2322, JOUR 2307, SOCI 1301, SOCI 1306, PSYC 1301, PSYC 1349

⁵ Choose **World/European Lit** from ENGL 2322, 2323, 2362, 2363

⁶ Choose **Laboratory Science** from BIOL 1306/1106, BIOL 1307/1107, CHEM 1305/1105, CHEM 1307/1107, CHEM 1311/1111, CHEM 1312/1112, PHYS 1301/1101, PHYS 1302/1102, PHYS 2325/2125, PHYS 2326/2126

⁷ SPCM 1315 – Fundamentals of Speech is required for teacher certification. This course counts toward the core curriculum in the **Humanities** category.