

Check sheet for the B.S. Degree in Mathematics
Department of Mathematics
University of Central Arkansas

UCA STEM TEACH PURE MATHEMATICS OPTION

Core Courses (21 Hours)

COURSE NO.	COURSE	CREDIT HRS	PREREQUISITE	SEMESTER OFFERED
MATH 1496	Calculus I	4	C or better in MATH 1390 and MATH 1392; or C or better in MATH 1580; or equivalent.	Fall, Spring, & Summer
MATH 1497	Calculus II	4	C or better in MATH 1496.	Fall, Spring, & Summer
MATH 2335	Transition to Advanced Math	3	MATH 1497	Fall & Spring
MATH 2471	Calculus III	4	C or better in MATH 1497	Fall, Spring, & Summer
MATH 3320	Linear Algebra [Upper Core : I]	3	MATH 1497 or 2330	Summer
MATH 4371	Intro to Probability [Upper Core : R]	3	MATH 1497	Fall

Required Courses (24 Hours)

MATH 3331	ODE I [Upper Core : C]	3	MATH 1497	Fall & Spring
MATH 3360	Introduction to Rings and Fields	3	MATH 2335	Fall
MATH 3362	Introduction to Group Theory	3	MATH 3360	Spring
MATH 4313	Functions and Modeling	3		Fall
MATH 4345	College Geometry	3	MATH 1496	Spring
MATH 4362	Advanced Calculus I [Upper Core: Z]	3	MATH 2471	Fall
MATH 4372 OR MATH 3311	Introduction to Statistical Inference OR Statistical Methods II	3	MATH 4371 MATH 2311 or equivalent	Spring On Demand
MATH X3XX	Upper Division Math Elective	3		

AND UCA STEM TEACH MINOR

EDUC 1100	Inquiry Approaches to Teaching	1		Fall/Spring
EDUC 1101	Inquiry Based Lesson Design	1	EDUC 1100	Fall/Spring
EDUC 1301	Knowing and Learning	3	EDUC 1100	Fall/Spring
EDUC 2301	Classroom Interactions	3	EDUC 1301 OR or consent of instructor	Fall/Spring
EDUC 3300	Project-Based Instruction	3	Consent of instructor and admission to teacher ed program	Fall/Spring
STEM 3305	Perspectives on Mathematics & Science	3	EDUC 1301 or consent of instructor	Fall/Spring
STEM 3310	Research Methods in Mathematics & Science	3	EDUC 1301 or consent of instructor	Fall/Spring
STEM 4305	Apprentice Teaching Seminar	3	Completion of all other courses Co-requisite: 4600 Apprentice Teaching	Fall/Spring
⁴ STEM 4600	Apprentice Teaching	6	Completion of all other courses Co-requisite: 4305 Apprentice Teaching Seminar	Fall/Spring

OTHER REQUIREMENTS

- Must complete 120 semester hours including 38 hours of General Education.
- GPA of 2.5 or better in each of the major and minor fields
- Must have 40 hours of upper level (3000 or 4000) courses.
- Praxis II content exams must be passed before enrolling in STEM 4600.
- At least 15 hours of the major must be earned in residence.