CHECKSHEET FOR THE B.S. DEGREE IN MATHEMATICS DEPARTMENT OF MATHEMATICS

University of Central Arkansas

UCA STEM TEACH MATHEMATICS EDUCATION OPTION

	Core	e Cour	ses (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
				Fall, Spring, &
MATH 1497	Calculus II	4	C or better in MATH 1496.	Summer
MATH 2335	Transition to Advanced Math	3	MATH 1497	Fall & Spring Fall, Spring, &
MATH 2471	Calculus III	4	C or better in MATH 1497	Summer
MATH 3320	Linear Algebra	3	MATH 1497 or 2330	Fall, Spring, & Summer
MATH 4371	Introduction to Probability Theory	3	MATH 1497	Fall
	Requi	red Co	urses (28 Hours)	
MATH 2441	Mathematical Computation	4	MATH 1497	Fall & Spring
MATH 3360	Abstract Algebra I	3	MATH 2335	Fall
MATH 3370	Math in the Secondary Schools	3	Admission to Secondary Teacher Education or the intent to register for MATH 4301 in the subsequent semester	Spring
MATH 4301	Secondary Math Methods	3	MATH 2471, 3370	Fall
MATH 4313	Functions and Modeling	3		Fall
MATH 4345	College Geometry	3	MATH 1496	Spring
MATH 2330 OR	Discrete Structures I OR	3	CSCI 1470 and MATH 1491 or MATH 1496	Fall & Spring
MATH 3354	Concepts of Discrete Mathematics	3	MATH 1390 or consent of instructor	Spring
MATH 4372 OR	Introduction to Statistical Inference OR	3	MATH 4371	Spring
MATH 3311	Statistical Methods II		MATH 2311 or consent of instructor	On Demand
MATH X3XX	Upper Division Math Elective	3		
	AND U	CA STE	M 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.