

CHECK SHEET FOR THE B.A. DEGREE IN MATHEMATICS

DEPARTMENT OF MATHEMATICS

University of Central Arkansas

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	Fall, Spring & Summer
MATH 4371	Intro to Probability Theory [Upper Core : R]	3	MATH 1497	Fall

Required Courses (12 hours)

MATH 3331	Ordinary Differential Equations 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 4362	Advanced Calculus I [Upper Core : Z]	3	MATH 2471	Fall

Choose 2 Electives (6 Hours)

MATH 4305	Ordinary Differential Equations II	3	MATH 3320, 3331	Fall
MATH 4315	Partial Differential Equations	3	MATH 2471 and MATH 3331	Fall
MATH 4330	Mathematical Modeling in Biology	3	C or better in MATH 3331	Fall
MATH 4340	Numerical Methods	3	MATH 1497, 3320 and CSCI 1470 or equivalent	Spring
MATH 4363	Advanced Calculus II	3	MATH 4362	Spring
MATH 4372	Intro to Statistical Inference	3	MATH 4371	Spring
MATH 4374	Intro to Stochastic Processes	3	MATH 4371 or Consent of instructor	Fall
MATH 4375	Introduction to Topology I	3	Consent of instructor	On Demand
MATH 4385	Complex Analysis	3	MATH 2471	On Demand

OTHER REQUIREMENTS

- MINOR REQUIRED
- Must complete 120 semester hours including 38 hours of General Education.
- GPA of 2.00 or better in each of the major and minor fields
- Must have 40 hours of upper level (3000 or 4000) courses.
- Must complete three semester hours of a foreign language at 2000 level or above.
- At least 15 hours of the major must be earned in residence.