CHECK SHEET FOR THE B.S. DEGREE IN MATHEMATICS
DEPARTMENT OF MATHEMATICS
University of Central Arkansas

APPLIED MATHEMATICS TRACK (49-51 HRS)

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	3	MATH 1497 or 2330	Fall, Spring & Summer
MATH 4371	Intro to Probability Theory	3	MATH 1497	Fall

Required Courses (16 Hours)

COURSE NO.	COURSE	CREDIT HRS	PREREQUISITE	SEMESTER OFFERED
MATH 2441	Mathematical Computation	4	C or better in MATH 1497	Fall
MATH 3331	Ordinary Differential Equations	3	MATH 1497	Fall, Spring
MATH 4305	Applied Math I	3	MATH 3320, 3331	Fall
MATH 4306	Applied Math II	3	MATH 4305	Spring
MATH 4372	Introduction to Statistical Inference	3	MATH 4371	Spring

Choose 2 Electives (6 Hours)

COURSE NO.	COURSE	CREDIT HRS	PREREQUISITE	SEMESTER OFFERED
MATH 4315	Partial Differential Equations	3	MATH 2471 and MATH 3331	Fall
MATH 4316	Fundamentals of Applied Math for Fluid and Granular Materials	3	MATH 4315	Spring
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 4373	Regression Analysis	3	MATH 4372	Fall
MATH 4374	Intro to Stochastic Processes	3	MATH 4371 or Consent of instructor	Fall
MATH 4385	Complex Analysis	3	MATH 2471	On Demand

Ancillary Requirements (6-8 hours)	OTHER REQUIREMENTS
PHYS 1410 and 1420 **OR** PHYS 1441 and 1442 **OR** CHEM 1450 and CHEM 1451 **OR** ECON 2320 and ECON 2321	• 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. • At least 15 hours of the major must be earned in residence.