

GRADUATION CHECKSHEET
COLLEGE OF SCIENCE

Bachelor of Science: Mathematics Major
 Applied Computational Mathematics Option
 Effective for Students Graduating in Calendar Year 2008

I. University Core Curriculum (30 – 36 credits): All courses used for the core curriculum must be on the approved University Core Curriculum list. Area 2 and Area 3 each requires 6 hours. Area 4 requires a single 8 hour laboratory sequence in Biology, Chemistry, Geology or Physics, but the 2 hour lab portion of this requirement is currently waived by the Provost. Mathematics majors must take Math 1205-1206 or its equivalent to satisfy the Area 5 core requirement.

Area 1: Writing and Discourse (6 credits) _____ 3 ()
 _____ 3 ()

Area 2: Ideas, Cultural Traditions and Values (6 credits) _____ 3 ()
 _____ 3 ()

Area 3: Society and Human Behavior (6 credits) _____ 3 ()
 _____ 3 ()

Area 4: Scientific Reasoning and Discovery (6 credits) _____ 3 ()
 _____ 3 ()

Area 5: Quantitative and Symbolic Reasoning (met by major)

Area 6: Creativity and Aesthetic Experience (3 credits) _____ 3 ()

Area 7: Critical Issues in a Global Context (3 credits) _____ 3 ()

For students entering prior to Fall 2005: Writing Intensive (6 credits) MATH 3034 3 ()
 _____ 3 ()

For students entering Fall 2005 or later: ViEWS Requirement (met by major)

Foreign languages: The equivalent of three years of one foreign language _____ 3 ()
 in secondary school. * _____ 3 ()

II. Required Mathematics Courses (49 Credits – 3 credits of which are also listed above) Math 4445 and 4446 require computer programming skills. None of the courses listed in II A-E have course prerequisites that are not listed in II A-E. Some of the possible mathematics electives in F have prerequisites that are not listed in II A-E.

A. Calculus

MATH 1205 3 ()
 MATH 1206 3 ()
 MATH 1224 2 ()
 MATH 2224 3 ()

B. Linear Algebra, ODE's

MATH 1114 2 ()
 MATH 2214 3 ()
 MATH 3144 3 ()

C. Proofs, Advanced Calculus

MATH 3034 ** 3 ()
 MATH 3214 3 ()
 MATH 3224 3 ()

D. Computational Mathematics

MATH 4445 3 ()
 MATH 4446 3 ()
 MATH 4414 3 ()

** In order to enroll in MATH 3034, a mathematics student must either (a) obtain a C or better in the final attempt of each of MATH 1114, 1205, 1206, 1224, and (2224 or 2214); or (b) have at least a 2.2 GPA in these five courses with at most one grade of C- and no D's in the last attempt in each.

*** The six hours of math electives must be chosen from Mathematics courses numbered between 4024 and 4454, with the following exceptions: (a) MATH 3124 can be used to satisfy three of the six hours required. (b) No more than 3 hours from MATH 4044, 4334, 4344 can be used to satisfy the six hour requirement.