

Mathematics, B.A./B.S., Theoretical Mathematics Concentration

303-556-3208 Science Building 1022

Catalog 12-13

This sheet applies to the 2012-13 catalog *only*. It does not replace the full catalog or departmental advising sheets as official statements of requirements. Students with declared majors *must* work with a faculty advisor on course selection and sequencing to ensure a timely graduation.

General Studies
Major courses
Minor
Electives

33 min
39-40
18 min
29-30
120 min

Students who have reached junior standing (60 hrs) should request a CAPP (graduation compliance report) and review it with a faculty advisor.

*TO BE COMPLETED WITHIN FIRST 30 COLLEGE-LEVEL CREDIT HOURS

Written Communication

- ___ ENG 1010 (3 hrs.) Freshman English: The Essay*
or ENG 1008/1009 (6 hrs.) Freshman Comp: The Essay Part I & II*
___ ENG 1020 (3 hrs.) Freshman English: Anal., Rsrch. & Docum.
(must be completed within 45 credit hours)

Quantitative Literacy*

- ___ MTH 1110-4 College Algebra or higher-level mathematics course

Oral Communication*

- ___ (3 hrs.)

Arts and Humanities

- ___ (3 hrs.)
___ (3 hrs.)

Historical

- ___ (3 hrs.)

Natural and Physical Sciences

- ___ (3 hrs.)
___ (3 hrs.)

Social and Behavioral Sciences I

- ___ (3 hrs.)

Social and Behavioral Sciences II

- ___ (3 hrs.)

Global Diversity

- ___ (3 hrs.) may be satisfied within General Studies

MAJOR CORE COURSES (Please see a Faculty Advisor)

All majors in mathematics are required to complete the following basic core of courses (with a required minimum grade of "C" in each of these courses).

- ___ MTH 1410 (4 hrs) Calculus I
___ MTH 2410 (4 hrs) Calculus II
___ MTH 2420 (4 hrs) Calculus III
___ MTH 3100 (3 hrs) Introduction to Mathematical Proofs

One of the following three courses:

- ___ CS 1050 (4 crh) Computer Science 1
OR CSS 1247 (4 crh) Introduction to Programming: Visual Basic
OR CSS 1510 (4 crh) Computer Programming: FORTRAN

Required Theoretical Mathematics Concentration Courses

- ___ MTH 3110 (3 crh) Abstract Algebra I
___ MTH 3140 (4 crh) Linear Algebra*
___ MTH 4410 (4 crh) Advanced Calculus I
___ MTH 4420 (3 crh) Advanced Calculus II

*MTH 3130 and one of the following (MTH 3650 or MTH 4150 or MTH 4640) may substitute for MTH 3140.

Choose two of the following courses:

- ___ MTH 4110 (3 crh) Abstract Algebra II
___ MTH 4450 (4 crh) Complex Variables
___ MTH 4660 (3 crh) Topology

MINOR (required)

___ - 3 Multicultural Requirement

(may be satisfied within General Studies major, minor, or elective)

ELECTIVES 29-30