

“W” Number: _____
 Student Name: _____
 Advisor Name: _____

Catalog: 2021-2022 University of Wyoming Catalog
Program: Mathematics, B.S.

Mathematics, B.S.

The department offers both a B.S. and B.A. degree in Mathematics. A degree in mathematics should prepare students to enter either graduate studies or the workforce with a skill set that could only come from an intense study of both quantitative reasoning and rigorous proof. This can be accomplished by focusing on the following goals for our undergraduate major:

1. Develop mathematical thinking and communication skills
2. Develop skills with a variety of technological tools
3. Provide a broad view of the mathematical sciences
4. Require study in depth

Lower Division Core Courses

Course Name	Credits:	Term Taken	Grade	Gen Ed
MATH2200 - Calculus I	Credits: 4			
MATH2205 - Calculus II	Credits: 4			
MATH2210 - Calculus III	Credits: 4			
MATH2310 - Applied Differential Equations I	Credits: 3			
MATH2250 - Elementary Linear Algebra	Credits: 3			
MATH2800 - Mathematics Major Seminar	Credits: 2			

Upper Division

These courses, known as the transition courses, introduce students to the three main areas of mathematics research currently represented in the department.

At the upper division, all mathematics majors must take

Course Name	Credits:	Term Taken	Grade	Gen Ed
MATH3205 - Analysis I: Elementary Real Analysis	Credits: 3			
MATH3500 - Algebra I: Introduction to Rings and Proofs	Credits: 3			
MATH3340 - Introduction to Scientific Computing	Credits: 3			

Two-Course Sequence

Every mathematics major must select one two-course sequence that builds on the corresponding transition course. This sequence provides the student with an opportunity to study one of these areas in greater depth.

Course Name	Credits:	Term Taken	Grade	Gen Ed
MATH4200 - Analysis 2: Advanced Analysis	Credits: 3			
MATH4205 - Analysis 3: Undergraduate Topics in Analysis	Credits: 3			
OR				
MATH4510 - Algebra II: Introduction to Group Theory	Credits: 3			
MATH4520 - Algebra III: Topics in Abstract Algebra	Credits: 3			
OR				
MATH4340 - Numerical Methods for Ordinary and Partial Differential Equations	Credits: 3			
MATH4440 - Introduction to Partial Differential Equations I	Credits: 3			

Upper Division Math Courses

Finally, an additional 12 credits of upper division math courses (3000 and above) are required. It is recommended that these courses be selected to provide a broad view of mathematics.

Two of the math electives may be chosen from a list of approved courses that have significant math content, upon approval by the student's advisor. More details about such courses are available on the math department's web site, www.uwo.edu/mathstats/.

Only grades of C or better will be accepted for the major.

Notes: