

University of Wyoming Sample Four-Year Degree Plan
Catalog Year: 2019-20

Mathematics, BA/BS



This sample degree plan is a guide, to be used for planning in consultation with your academic advisor. Actual course sequence may vary by student. A ▲ symbol identifies courses that must be taken and passed during the suggested semester in order for a student to stay on track toward completing the degree program within four years.

Course Sequence	Course Prefix	Course Number	Course Title	Credit Hours	Min Grade	Notes
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Freshman Fall Semester

			USP Communication 1	3	C	C1
			USP First-Year Seminar	3	C	FY
			A&S Core Diversity in the US	3		ASD
MATH	2200		Calculus I ^{1,2}	4	C	Q
			Elective	3		
Credit hours subtotal:				16		

Freshman Spring Semester

			USP Communication 2	3	C	C2
			USP Physical & Natural World	3		PN
MATH	2205		Calculus II ²	4	C	
MATH	2800		Math Major Seminar ²	2	S	Offered S/U only
			Elective	3		
Credit hours subtotal:				15		

Sophomore Fall Semester

			USP Physical & Natural World	3		PN
MATH	2210		Calculus III ²	4	C	
MATH	2250		Elementary Linear Algebra ²	3	C	
			Electives	6		
Credit hours subtotal:				16		

Sophomore Spring Semester

			USP US & Wyoming Constitutions	3		V
			A&S Core Global Awareness	3		ASG
MATH	2310		Applied Differential Equations ²	3	C	
			Transitions course ³	3	C	
			Elective	3		
Credit hours subtotal:				15		

This sample degree plan is a guide for course work in the major. • Course sequencing may need to be altered if ACT, SAT or Math Placement scores require a student to take pre-college courses before taking required math or English courses. • Not all courses are offered every semester and some electives may have prerequisites. Students should review course descriptions in the University Catalog and consult with their academic advisor to plan accordingly.

University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • University Studies Program (USP) Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject, but can be cross-listed with the major.

College of Arts and Sciences requirements:

Students must take two "core" courses in addition to UW's University Studies Program requirements: Diversity in the United States (ASD) and Global Awareness (ASG). • No more than 60 hours in the major subject may be used toward the 120 credit hours required for graduation. • At least 30 hours in the major subject must be completed with a grade of C or better (the major may require more).

Notes continued on next page(s).

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Course Sequence	Course Prefix	Course Number	Course Title	Credit Hours	Min Grade	Notes
Junior Fall Semester						
			USP Human Culture	3	H	
			Transitions course ³	3	C	
			Upper Division Math Elective ⁴	3	C	
			Electives	6		
Credit hours subtotal:				15		
Junior Spring Semester						
			USP Human Culture	3	H	
			Depth Sequence Course ⁵	3	C	
			Transitions course ³	3	C	
			Upper Division Elective	3		
			Elective	3		
Credit hours subtotal:				15		
Senior Fall Semester						
			USP Communication ³	3	C	C3: MATH 4200 or MATH 4510 recommended
			Depth Sequence Course ⁵	3	C	
			Upper Division Math Elective ⁴	3	C	
			Upper Division Elective	3		
			Elective	3		
Credit hours subtotal:				15		
Senior Spring Semester						
			Upper Division Math Electives ⁴	6	C	
			Upper Division Electives	6		
			Elective	3		
Credit hours subtotal:				15		
TOTAL CREDIT HOURS				122		

Math Program notes:

All courses for the major must be completed with a grade of C or better.

¹ See the "Prerequisite and MPE Cut Score Reference Chart" on the Math Placement website for the most up-to-date math placement equivalencies: <http://www.uwyo.edu/mathstats/math-placement/>.

² Required lower division core course. The core courses should be completed as soon as possible, ideally within the first four semesters. This means that majors will need to take more than one math course during some semesters.

³ Transition courses introduce students to the three (3) main areas of mathematical research in the department. The first of the three upper division transitions courses should be taken within the first four semesters to enable the depth sequence (described below) to be completed by the end of the junior year. To fulfill this requirement, mathematics majors must take:

- MATH 3205 Elementary Real Analysis
- MATH 3340 Introduction to Scientific Computing
- MATH 3500 Algebra I: Introduction to Rings and Proofs

⁴ Twelve (12) credits of upper division (3000-level and above) elective math credits are required. It is recommended that these courses be selected to provide a broad view of mathematics. Two (2) of the math electives may be chosen from a list of approved courses that have significant mathematical content. Please consult with an academic advisor about the list and which courses best fulfill academic and personal goals.

⁵ For depth sequence courses, a mathematics major must select one (1) two-course sequence that builds on one of the transition courses. This sequence gives the student an opportunity to study one of these areas in greater depth. The two-course sequences are:

- MATH 4200 (Analysis 2: Advanced Analysis) and MATH 4205 (Analysis 3: Undergraduate Topics in Analysis)
- MATH 4340 (Numerical Methods for Ordinary and Partial Differential Equations) and MATH 4440 (Introduction to Partial Differential Equations).
- MATH 4510 (Algebra II: Introduction to Group Theory) and MATH 4520 (Algebra III: Topics in Abstract Algebra)