

Advising Worksheet (2019-2020 Catalog)

For all Undergraduate Math Majors

(Except Math-Ed and the Combined Math/CS Major)

Note that the UM Catalog is the ultimate authority regarding degree requirements. Please bring any mistakes on this worksheet immediately to the attention of the Department of Mathematical Sciences.

Basic Information

Name:	Date:
Email:	ID#: 790
Advisor:	Catalog for Graduation:
If applicable: <input type="checkbox"/> Minor or <input type="checkbox"/> 2 nd Major in:	

(A) General Education Requirements

Fill out a General Education Worksheet

(B) Non-Math Courses

(B.1) Either one course chosen from CSCI 100, 126 (=CSCI 250), 135, 136; **or** completion of the General Education Requirement "Group III: Modern and Classical Language" (not the symbolic systems exception); **or** a 2nd major. (Note: a minor does not waive this requirement.)

Course	Title	Cr.	Term	Grade
		cr		

(B.2) Science Courses: Take 18 credits in at most 3 areas selected from astronomy (ASTR), biology (BIO*), chemistry (CHMY), computer science (CSCI, except CSCI TR*), economics (ECNS), forestry (FORS, WILD), geosciences (GEO), management information systems (BMIS), and physics (PHSX). This is **waived** if you complete a minor or a 2nd major.

Course	Title	Cr.	Term	Grade
		cr		
		cr		
		cr		
		cr		
		cr		
		cr		
		cr		

(B.3) Advanced College Writing Requirement: Either an approved Advanced College Writing course (e.g., M 429), or a senior thesis (M 499):

Course	Title	Cr.	Term	Grade
		cr		

(C) Core Math Courses

Course	Title	Cr.	Term	Grade
M 171	Calculus I (or M 181 Honors Calculus I)	4 cr		
M 172	Calculus II (or M 182 Honors Calculus II)	4 cr		
M 210	Intro to Mathematical Software	3 cr	Spr	
M 221	Introduction to Linear Algebra	4 cr		
M 273	Multivariable Calculus	4 cr		
M 300	Undergraduate Math Seminar	1 cr		
M 307	Introduction to Abstract Mathematics	3 cr		

(D) Concentration (not required; see back for details)

None Applied C & O Pure Statistics

(E) Upper-Division Mathematics Requirement

Take at least 7 courses from the following list (at least 3 must be at the 400-level): M 301, 311, 325, 326, 361, 362, 381, 412, 414, 429, 431, 432, 439, 440, 445, 461, 462, 472, 473, 485 and STAT 341, 421, 422, 452. **The required total number of credits is 23 credits.** Note that the 300/400 level computer labs (M 317, 363, 418 and STAT 457, 458) count towards the total number of required credits (but not towards the 7 courses). *If you select a concentration, keep the concentration requirements in mind.*

If completing a minor: Take 6 courses and at least 20 credits.

If completing a 2nd major: Take 6 courses and at least 18 credits.

Course	Title	Cr.	Term	Grade
		cr		
		cr		
		cr		
		cr		
		cr		
		cr		
		cr		
		cr		
		cr		

(F) Concentration Requirements

- It is not necessary to select a concentration.
- **Applied Mathematics:** M 311, 412, and two courses chosen from 414, 440, 445 and 472. (M 381 and 485 are recommended.)
- **Combinatorics & Optimization:** M 361, 362, 485, and one course chosen from CSCI 332, M 414, M 440, STAT 341.
- **Pure Mathematics:** Four courses chosen from M 381, 431, 432, 472, and 473.
- **Statistics:** Four courses chosen from STAT 341, 421, 422, 452 and M 461, 462.

(G) Some Other Important Requirements

- **Traditional Letter Grade Requirement:** All courses listed on this worksheet, including the courses under (B), must be completed with a traditional letter grade of C- or better. This is also the case for all courses taken to satisfy General Education Requirements. The only exception: M 300, if taken before Fall 2017.
- **Upper-Division Credit Requirement:** At least 39 credits in upper-division courses (numbered 300 and above) are required.
- **Credit Limitation in the Major:** A maximum of 60 credits in mathematical sciences courses (M and STAT courses) can be counted towards the 120 credits required for this major.
- **Math Residency Requirement:** Among M 307 and the 6-7 courses taken to satisfy (E), at least 4 must be taken at UM-Missoula.
- **GPA Requirement:** A cumulative GPA of 2.0 is required in each of the following categories:
 - All M and STAT courses used to fulfill major requirements
 - All courses used to fulfill major requirements
 - All work attempted in the major (M and STAT courses) at UM-Missoula
 - All work attempted at UM-Missoula
- **Petitions** for substitutions or waivers of departmental requirements must be approved in writing by the Math Department's Associate Chair for the Undergraduate Program; denied petitions can be appealed to the Math Department's Undergraduate Committee.

Advising Highlights from the UM Catalog

Here is a small selection of particularly important rules from the 2019-2020 Catalog. For links to the requirements, visit <http://hs.umt.edu/math/undergraduate/majors/advising/advising-highlights.php>.

Credit Load

The maximum credit load is 21 credits per semester; the minimum full-time load for undergraduate students is 12 credits per semester. To earn 120 credits in 4 years, **students should take about 15-16 credits each semester.**

Requirements for the First Bachelor Degree

- 120 credits total are required for most B.A. degrees.
- **Credit/No Credit Grading (CR/NCR):**
 - A maximum of 18 "credit/no credit" credits are allowed.
 - Courses taken to satisfy General Education Requirements must be taken for traditional letter grade.
 - Courses required for the student's major or minor must be taken for traditional letter grade. For math majors, there is one exception: M 300, if taken before Fall 2017.
- **Residency Requirements:** Of the last 45 credits required for the degree, at least 30 must be earned from UM-Missoula.
- **Undergraduates in Graduate Courses:** only post-baccalaureates and seniors having a GPA of 3.0 or greater may, with consent of instructor, enroll in 500-level courses (for undergraduate credit).

Graduation:

- You must submit your **Graduation Application** nearly 2 semesters before your expected graduation date.
- Aim high! Look at the rules for **Graduation with Honors or High Honors.**