

# Advising Worksheet (2011-2012 Catalog)

*For all Undergraduate Math Majors*

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

**(A) General Education Requirements:**

Fill out a General Education Worksheet.

**(B) Non-Math Courses:**

(1) **Either** one course from CSCI 100, 135, 136 (CS 101, 131, 132):

<u>Course No.</u>	<u>Name</u>	<u>Credits</u>	<u>Term</u>	<u>Grade</u>
CSCI _____	_____	( )		

(If you are not taking M 210 (which is required beginning with the 2011-2012 Catalog), you need to take two of these courses.)

**or** (equivalent of) the 2<sup>nd</sup> semester of a UM Foreign language course:

_____	_____	( )		
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**or** a second major: \_\_\_\_\_

(2) **Science courses:** 18 credits from at most 3 sciences selected from astronomy, biology, chemistry, computer science, economics, forestry, geosciences, management, and physics. (Note that ‘biology’ includes all courses with prefixes BIOL, MICB, BIOB, BIOE, BIOH, BIOM, and BIOC.)

_____	_____	( )		
_____	_____	( )		
_____	_____	( )		
_____	_____	( )		
_____	_____	( )		
_____	_____	( )		
_____	_____	( )		

**or** a minor: \_\_\_\_\_ **or** a second major: \_\_\_\_\_

(3) **Upper-division writing requirement:** **Either** an upper division general education writing course (e.g., M 429 = MATH 406):

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**or** a senior thesis (M/MATH 499).

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Email: \_\_\_\_\_ ID: 790 - -

Advisor: \_\_\_\_\_ Catalog for Graduation: \_\_\_\_\_

**(C) Core Math Courses:**

			<u>Term</u>	<u>Grade</u>
M 171 = MATH 152	Calculus I	(4)		
M 172 = MATH 153	Calculus II	(4)		
M 210	Intro. Math. Software	(3)	S	
M 221 = MATH 221	Lin. Alg. ( <i>recomm before 307</i> )	(4)		
M 273 = MATH 251	Multivariable Calculus	(4)		
M 300 = MATH 300	Undergrad. Math Seminar	(1)		
M 307 = MATH 305	Intro. to Abstract Math	(3)		

**(D) Option Requirements:** If you wish to select an option, check the appropriate box(es) and make sure to choose the courses in **(E)** accordingly. *The option requirements are described on the back.* Note that it is not required to choose an option.

Applied Mathematics  Pure Mathematics

Combinatorics & Optimization  Statistics

**(E) At Least 6 Additional 300/400 Level Math Courses** from the following list (at least three of the six must be numbered 400 or above): M 301, 311, 325, 326, 361, 362, 381, 412, 414, 429, 431, 432, 439, 440, 445, 472, 473, 485 and STAT 341, 421, 422. *If you want to specialize in one of the options, keep the option requirements in mind.*

(The old MATH numbers are: MATH 301, 311, 325, 326, 341, 351, 381, 382, 406, 412, 414, 421, 422, 431, 441, 442, 451, 452, 471, 475, 485.)

_____	_____	( )		
_____	_____	( )		
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_____	_____	( )		
_____	_____	( )		
_____	_____	( )		

**Grade Requirement:** With the exception of M/MATH 300, all courses listed on this worksheet, **including the courses under (B)**, must be completed with a grade of C- or better.

**Math Residency Requirement** (new with the 2011-2012 Catalog): Among M 307 and the six courses required in (E), at least 4 must be taken from UM-Missoula.

## Option Requirements for the B.A. in Mathematical Sciences:

### Applied Mathematics:

New Course Numbers:	M 311, 412, 414, and one of M 440, 472.	Recommended:	M 381, 485
Old Course Numbers:	MATH 311, 412, 414, and one of MATH 471, 452.	Recommended:	MATH 351, 485

### Cominatorics & Optimization:

New Course Numbers:	M 361, 362, 485, and one of M 414, 440, STAT 341, or CSCI 332.
Old Course Numbers:	MATH 381, 382, 485, and one of MATH 414, 471, MATH 341, or CS 332.

### Pure Mathematics:

New Course Numbers:	4 courses chosen from M 381, 431, 432, 472, 473.
Old Course Numbers:	4 courses chosen from MATH 351, 421, 422, 452, 451.

### Statistics:

New Course Numbers:	STAT 341, 421, 422.	Additional mathematics and statistics courses chosen with the advisor.
Old Course Numbers:	MATH 341, 441, 442.	

## Advising Guidelines from the 2011-2012 UM Catalog

**References to Sections in the Online Catalog:** **APP** = “Academic Policies and Procedures”, **GUR** = “General University Requirements”, **RG** = “Requirements for Graduation”. These sections are linked from the chapter “Academics”. In the catalog sections APP, GUR and RG, search for the **KEYWORDS IN SMALL CAPS**.

**CREDIT LOAD** (see APP): maximum is 21 credits per semester; minimum full-time load is 12 credits per semester.

### Requirements for a First Bachelor Degree (see APP, GUR, RG)

- 120 credits total: (RG: BACHELOR DEGREES) (The math-ed option requires 128 credits.)
  - **Minimum of 39 credits in courses numbered 300 or above** (RG: UPPER-DIVISION REQUIREMENT)
  - Maximum of 60 credits in major can be counted toward degree (students in the combined Math/CS major can count 75 credits) (GUR: CREDIT LIMITATIONS IN A MAJOR)
- **Courses taken to satisfy the requirements of the major must be completed with a grade of C- or better.** (GUR: GRADE REQUIREMENT)
- **GPA of at least 2.00 in all work attempted in major** (GUR: GRADE REQUIREMENT)
- Maximum of 18 “credit/no credit” credits (see APP: CREDIT/NO CREDIT GRADING for limitations). Note: With the exception of M/MATH 300, all math courses counting towards a math major or minor must be taken for traditional letter grade.
- **General education requirements** (see GUR). (Transfer students search in GUR for GENERAL EDUCATION FOR TRANSFER STUDENTS.)
- **RESIDENCY REQUIREMENTS** (see RG): Of the last 45 credits required for the degree, at least 30 must be earned from UM-Missoula.
- Students must declare a major before completing 45 credits or after 3 semesters, whichever occurs first. (GUR: MAJOR REQUIREMENTS)
- **UNDERGRADUATES IN GRADUATE COURSES** (see APP): only post-baccalaureates and seniors having a GPA of 3.0 or greater may, with consent of instructor, enroll in 500-level courses.

### Graduation:

- Must apply for DEGREE CANDIDACY nearly 2 semesters before your expected graduation date. (RG)
- **GRADUATION WITH HONORS OR HIGH HONORS:** See requirements in RG and talk to your advisor.