

MATHEMATICS DEGREE

Program Check Sheet

NAME & DATE _____

I. Institutional Graduation Requirements

- _____ Complete a minimum of 180 credit hours. Up to 120 credit hours of lower division transfer course work may be applied to the degree.
- _____ Earn an Eastern GPA of at least 2.000 and a composite GPA of 2.000. A transfer GPA and the Eastern GPA are combined at the time of graduation.
- _____ Complete a minimum of 60 credit hours of upper - division coursework (300-400 level).
- _____ Complete all requirements in the major, including at least 35 credit hours, 25 of which must be 300 or 400 level courses. Of these, a minimum of 20 must be from EOU of which 10 must be upper division.
- _____ Complete a minimum of 45 credit hours from EOU of which 30 must be upper division.
- _____ A maximum of 90 credit hours in one discipline may be applied to the B.S. or the B.A. degree.
- _____ Complete a minimum 3-credit college-level math/stat course (see catalog for details).
- _____ Complete college-level foreign language requirement for B.A. (see catalog)
- _____ Complete General Education Core with a C- or better. (Minimum of 60 credits, see catalog)

University Writing Requirement: (Must complete UWR with a C- or better)

- _____ Complete first-year writing courses as required by placement test: _____
- _____ Complete one lower division UWR writing intensive course as identified by each major:

- _____ Complete two upper division UWR writing intensive courses as identified by each major:
_____ and _____
- _____ Up to 12 credit hours in PE activity courses, up to 12 credit hours in music activity courses, and up to 12 credit hours in INTACT courses (Music majors may exceed the MUS limitation).
- _____ Up to 45 credit hours of practicum coursework may be applied to the degree.

Graduation Application filed _____.

May apply for graduation as early as one year in advance by submitting an application for graduation to the Registrar's Office. The deadline for submitting an application for graduation is the second Friday of the term prior to the expected graduation date.

Advisor _____

Date _____

II. Program Requirements

A. LOWER DIVISION CORE (24 credits) Hrs Grade

(All must be completed with a "C-" or better)

CS 161 Foundations of CS I	4
Math 251 Calculus I	4
Math 252 Calculus II	4
Math 253 Calculus III	4
Math 254 Calculus IV	4
Stat 243 Elementary Statistics	4

B. UPPER DIVISION CORE (24 credits) Hrs Grade

(All must be completed with a "C-" or better)

Math 341 Linear Algebra	4
Math 382 Structures of Abstract Math	4
Math 311 Advanced Calculus	4
Math 344 Modern Algebra I	4
Math 412 Real Analysis	4
OR	
Math 445 Modern Algebra II	4
Math 407 Capstone Seminar *	4

C. MATHEMATICS ELECTIVES - In addition to courses above, complete 20 credit hours of upper division mathematics courses, or complete a set of courses for one of the three concentrations.

C1. NO CONCENTRATION (20 credits of upper division math**)

** Stat 352 may be considered a math course for this requirement.

C2. MATHEMATICAL STUDIES CONCENTRATION

Math 323 Mathematical Modeling	4
Math 338 Modern Geometry	4
Math 355 Advanced Discrete Mathematics	4
Eight (8) additional credits of upper division mathematics electives**	

** Stat 352 may be considered a math course for this requirement.

C3. APPLIED MATHEMATICS CONCENTRATION

CS 162 Foundations of CS II	4
Math 321 Differential Equations	4
Math 323 Mathematical Modeling	4
Math 483 PDEs and Engineering Math	4
Stat 352 Statistics	4

Any two of the following classes		
Math 361	Probability and Statistics	4
Math 452	Operations Research	4
Math 462	Regression Analysis	4

C4. THEORETICAL MATHEMATICS CONCENTRATION

CS 162	Foundations of CS II	4
Math 321	Differential Equations	4
Math 338	Modern Geometry	4
Math 355	Advanced Discrete Mathematics	4
Whichever of the following was not taken as part of the upper division core		
Math 412	Real Analysis	4
OR		
Math 445	Modern Algebra II	4
Four (4) additional credits of upper division mathematics electives**		

** Stat 352 may be considered a math course for this requirement.

D. OTHER PROGRAM REQUIREMENTS

_____ Students taking the BA degree must complete two years of a foreign language.

_____ The combined GPA of all courses counting towards the major must be at least a 2.00.