Syllabi

Course Syllabi

1-2014

M 291.01: Special Topics - Probablility and Statistics for K-8 Teachers

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PROBABILITY AND STATISTICS FOR K-8 TEACHERS
MATHEMATICS 291 SECTION 1
CRN 34792

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Office Hours: M 1:10-3:00,W 1:10-2:45, Th 1:10-3:00

COURSE WEBPAGE http://www.math.umt.edu/roscoe/m291

GOALS Upon successful completion of this course, a student will be able:

1. Demonstrate an understanding of statistical variability,

2. Summarize and describe distributions,

3. Use random sampling to draw inferences about a population,

4. Conduct informal comparative inferences about two populations,

5. Explain chance processes and develop, use, and evaluate probability models, and

6. Describe and quantify patterns of association in bivariate data.

TEXT National Governors Association Center for Best Practices Council of Chief State School Officers. (2010). *Common core state standards for mathematics.* Washington, DC: National Governors Association Center for Best Practices, Council of Chief State School Officers.

GRADING 20% Homework
20% Projects
40% Mid-Semester Exams
20% Final

HOMEWORK Homework will be assigned every Wednesday and will be due at the beginning of class the following Wednesday. No late homework will be accepted for any reason. The lowest homework grade of the semester will be dropped in the calculation of your homework average. Homework is not only a fairly substantial portion of your grade, but is vital to your success in this class. Working with other students on homework is allowed and even encouraged, as long as you hand in your own work, and do not simply copy someone else's work.

PROJECTS Over the course of the semester I will assign several projects that will provide an opportunity for you to apply the knowledge that you have acquired in the course to investigate real and tangible phenomena. These projects will be announced in class.

EXAMS Exams will be cumulative. One sheet of notes is allowed as is a calculator. If you cannot make it to an exam, you must let me know before the exam is given. No make-up exams will be given without a documentable reason for missing the exam.

Exam 1 - February 24: Course Goals 1 and 2
Exam 2 - March 28: Course Goals 3, 4 and 5
Exam 3 - April 28: Course Goal 6
Final - 10:10-12:10AM Tuesday, May 13: Cumulative

CALCULATORS It is recommended that you own a graphing calculator. You are encouraged to bring it to class and use it however you like on homework assignments. I will use a TI-84+ in classroom demonstrations. Use of a graphing calculator will be allowed on all exams.

HONESTY All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar wit the Student Conduct Code. The Code is available for review online at `http://life.umt.edu/vpsa/student_conduct.php`.

GRADE SCALE Let S be your final weighted average in the course then,

$$
\begin{aligned}
93 &\le S < 100 &\Rightarrow\quad \text{A} \\
90 &\le S < 93 &\Rightarrow\quad \text{A-} \\
87 &\le S < 90 &\Rightarrow\quad \text{B+} \\
83 &\le S < 87 &\Rightarrow\quad \text{B} \\
80 &\le S < 83 &\Rightarrow\quad \text{B-} \\
77 &\le S < 80 &\Rightarrow\quad \text{C+} \\
73 &\le S < 77 &\Rightarrow\quad \text{C} \\
70 &\le S < 73 &\Rightarrow\quad \text{C-} \\
67 &\le S < 70 &\Rightarrow\quad \text{D+} \\
63 &\le S < 67 &\Rightarrow\quad \text{D} \\
60 &\le S < 63 &\Rightarrow\quad \text{D-} \\
0 &\le S < 60 &\Rightarrow\quad \text{F}
\end{aligned}
$$

ACCOMMODATION   The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors and Disability Services for Students (DSS). If you think that you may have a disability adversely affecting you academic performance, and you have not already registered with DSS, please contact DSS in Lommassen 154. I will work with you and DSS to provide an appropriate accommodation.

IMPORTANT DATES   Feb. 4 - Last day to add a course via CyberBear.
Feb. 14 - Last day to drop a course or change the grading option via CyberBear.
Apr. 7 - Last day to drop/add a course, change sections, change your grading option from Credit/No Credit to a letter grade (or vice versa), or change credit in a variable credit course. After this date a student is allowed to make these changes only by petition.
May 9 - Last day to petition to drop/add a course, change sections, change you grading option from Credit/No Credit to a letter grade (or vice versa), or change credit in a variable credit course. Petitions require signature and recommendation of instructor. Grounds for recommending late drops and changes of grading options are detailed in the university catalog.

TENTATIVE SEMESTER SCHEDULE

Monday	Wednesday	Friday
Jan 27 CG1-2	Jan 29 CG1-2	Jan 31 CG1-2
Feb 3 CG1-2	Feb 5 CG1-2	Feb 7 PROJ 1
Feb 10 CG1-2	Feb 12 CG1-2	Feb 14 REVIEW
Feb 17 Pres Day	Feb 19 EXAM 1	Feb 21 CG3-4
Feb 24 CG3-4	Feb 26 CG3-4	Feb 28 PROJ 2
Mar 3 CG3-4	Mar 5 CG3-4	Mar 7 CG5
Mar 10 CG5	Mar 12 CG5	Mar 14 CG5
Mar 17 CG5	Mar 19 CG5	Mar 21 CG5
Mar 24 CG5	Mar 26 REVIEW	Mar 28 EXAM 2
Mar 31 Spring Break	Apr 2 Spring Break	Apr 4 Spring Break
Apr 7 CG6	Apr 9 CG6	Apr 11 PROJ 3
Apr 14 CG6	Apr 16 CG6	Apr 18 CG6
Apr 21 CG6	Apr 23 CG6	Apr 25 CG6
Apr 28 CG6	Apr 30 REVIEW	May 2 EXAM 3
May 5 FIELDWORK	May 7 FIELDWORK	May 9 FIELDWORK
Final Exam 10:10-12:10AM Tuesday, May 13		