University of Montana

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Spring 2-1-2018

M 105.03: Contemporary Mathematics

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Syllabus
M 105, Sec. 3: Contemporary Mathematics
Spring 2018, MWF 12:00-12:50 in Math 211

Course Information:
- **Instructor**: David Patterson, Math 208, 243-6748, david.patterson@umontana.edu.
- **Textbook:** We will NOT use the e-book on Quantitative Literacy. I will put all course resources on Moodle.
- **Prerequisites:** M 090 (grade of B- or better), or M 095, or Level 3 (or higher) placement on ALEKS placement exam.
- **Office Hours**: See Moodle page.
- **Tutoring help** is available in Math at Mansfield tutoring center on the main floor of the Mansfield Library.

Grading
- **Tests, 60%.**
  We will have 5 mini-tests; your low score will be dropped. Makeups are not given except in exceptional circumstances (generally, a missed test will be your dropped one). Dates are:
  Fri, Feb 9
  Wed, Feb 28
  Mon, Mar 19
  Mon, Apr 16
  Wed, May 2

- **In-class worksheets/homework, 40%.** In-class worksheets will sometimes be collected at the end of class and graded. There is no makeup for these. Homework assignments are due at the beginning of class. Late homework is accepted up to the beginning of the next class. There is no penalty for the first late HW, but there will be a penalty of 25% for the second one and 50% thereafter. At the end of the semester, I will drop your lowest worksheet score and your lowest homework score.
- **Final exam**: Friday, May 11, 10:10 – 12:10. It is optional. If you take the final, your final exam score will be averaged with your mini-test average and count for 60% of your grade. You will be told your course grade before taking the final. Taking the final cannot lower your course grade.

Important dates:
- **Tuesday, January 31**: last day to add courses by Cyberbear.
- **Friday, February 9**: last day to drop classes or change grading option by Cyberbear.

- **Monday February 19:** Presidents' Day holiday.
- **March 26-30:** Spring break.
- **Monday, April 2:** last day to drop course or change grading option with paper form signed by advisor and instructor. Changes after this date require Dean's signature.
- **Friday, May 4**: last day of classes.
- **Final Exam (optional)**. **Friday, May 11, 10:10 – 12:10.**

Catalog description

An introduction to mathematical ideas and their impact on society. Intended for students wishing to satisfy the general education mathematics requirement.

Learning Outcomes

1. Read mathematical material at an appropriate level, reason mathematically, and write using mathematical notation correctly.
2. Formulate a problem precisely, and interpret solutions.
3. Apply elementary probability theory to construct models of random phenomena, including the use of simulations.
4. Use elementary statistical tools such as measures of center and spread, graphical representations of data, and statistical estimation of population proportions.
5. Use tools from one or more areas of mathematics to solve theoretical or applied problems. The areas could include, but are not limited to, finance, management science (e.g., graph models for network problems), social choice and decision making (e.g., elections, voting, fair division, Congress apportionment), geometry (e.g., symmetry, tilings), or mathematical games.

Incompletes

Incompletes are given at the discretion of the instructor and are only considered in cases where the student has been in attendance and doing passing work up to three weeks before the end of the semester, and for reasons beyond the student's control and which are acceptable to the instructor, the student has been unable to complete the requirements of the course on time. Negligence and indifference are not acceptable reasons.

Students with disabilities are welcome to discuss accommodations with me.

Academic Honesty

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary action by the University. All students need to be familiar with the Student Conduct Code. You can find it in the A-Z index on the UM home page.