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M 105.02N: Contemporary Mathematics with Co-Requisite Support

Lauren Sara Fern

University of Montana, Missoula, lauren.fern@umontana.edu

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**Mathematics 105 Contemporary Math Sections 02N and 04N
Grading and Policies Spring 2022**

Contact Professor:

- ✓ **Professor:** Lauren Fern
- ✓ **Email:** fernl@mso.umt.edu

Catalog Description:

<http://www.umt.edu/catalog/colleges-schools-programs/humanities-and-sciences/mathematical-sciences/default.php>

M 105 - Contemporary Mathematics

Credits: 3. Offered every term. Prereq. M 090 with a grade of C or better, or M 095, or M01 placement ≥ 17 , or ALEKS placement ≥ 3 , or ACT score of 22, or SAT score of 550 (with the new test), or completion of the M105 EdReady module. An introduction to mathematical ideas and their impact on society. Intended for students wishing to satisfy the general education mathematics requirement.

Learning Outcomes: Upon completion of this course, students will be able to:

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.

The Corequisite Model entails placing students directly in their college level math class, while providing the assistance needed with the prerequisite material. The advantage of this is that you will not just be learning seemingly arbitrary concepts in a developmental class, you will be learning these concepts and will be able to immediately see their utility and context in M105.

General Education Learning Outcomes:

Upon completion of the mathematical literacy requirement, a student will be able to effectively apply mathematical or statistical reasoning to a variety of applied or theoretical problems.

Notes About the Course:

This course is designed to illustrate several ways in which mathematics is used in the “real world”. We will explore some topics of general interest which are not typically taught in a formal mathematics class. The goal is for you to see not only how useful mathematics is, but also how beautiful and elegant it can be. Our focus in this class will be applications for students who are studying various trades.

Text:

We will use an Open Educational Resource text, primarily *Applied Algebra 1*, by Doug Gardner. This is a **free** textbook that you are allowed to print as needed. I would suggest saving the file to your computer. Access to a scientific calculator is also required; if you have access to a TI-83 or TI-84 many computations will be shorter. Classroom demonstrations will be done with a TI-84.

Grading:

Your course grade will be based on the following:

- | | |
|--------------------|----------------------|
| 40% of your grade: | Quizzes |
| 50% of your grade: | Activities/ Homework |
| 10% of your grade: | Attendance |

There is no final exam in the class.

Please note that this class is highly interactive with nearly daily in-class activities, hence attendance and participation are essential for success in the class. You are expected to be in class every day it meets. When any assignment is returned, there is one week from the date of return for contesting the grading. After that time, the grade will be accepted as final. All quizzes and assignments

to be turned in are announced well before-hand and an email will also be sent to the class alerting you of an upcoming due date. It is your responsibility to keep up to date on all such announcements.

<i>Grade</i>	<i>Grading Scale by Percentages</i>
A	90%+
B	89-80%
C	79-65%
D	64-55%
F	Less than 55%
CR	≥ 55%

*** If you are taking this course to fulfill a general education requirement or a requirement for your major or minor, you must take it for a traditional letter grade (not CR/NCR). If you decide anyhow to take this course with CR/NCR grading, a grade of “D-“is considered passing and will earn you credit for the course, BUT it will NOT fulfill your general education requirement NOR any requirement for your major or minor.***

Make-ups: It is your responsibility to notify me as soon as you know you will miss any quiz and it must be either prior to or within 24 hours of the quiz. If I do not receive an email within that period, the quiz score will be a 0.

Add/Drop Policies:

The last day to add/drop or change grading option to Audit by Cyberbear is **2/7**. The last day to change sections and to change grading options is 3/29. This is also the last day to drop. Changes after this deadline and until **5/6** must be done by Petition to Drop/Add after deadline and approved by me, your advisor and the appropriate Dean. Approval requires genuine extenuating circumstances as listed in the university catalog.

Extenuating circumstances are:

1. Missing a substantial number of classes due to illness, accident or family emergency.
2. A change in work schedule that makes it impossible to attend class or devote adequate time to the course.
3. Registration in the course by error and never attending class.

Reasons that are not satisfactory include:

1. Forgetting to turn in a drop slip.
2. Protecting your grade point average.

Incomplete (I) Grades:

To be eligible for an “I”, the following conditions must be met:

1. The student must have been in attendance and passing the course up to 3 weeks before the semester ends; and
2. The student is unable to complete the course due to extenuating circumstances, which usually means serious illness or death in the family.

Incompletes are not given under any other circumstances and are always given at the discretion of the instructor. See the 2021-2022 catalog for further information.

Misconduct:

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 with the [Student Conduct Code](#).

Disability modifications:

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and [Office for Disability Equity](#). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or call 406.243.2243. I will work with you and Disability Equity to provide an appropriate modification.

Important University-Wide Info and Dates:

- Monday, February 21: Presidents Day. No school.
- Monday-Friday, 21-25 March: Spring Break. No school.

Student expectations:

Attendance: Attendance is a required component of the course. If you must be absent, you are responsible for obtaining missed assignments and announcements (such as upcoming tests and activities), and being prepared for the next class.

Email: Students are expected to maintain an active email account and to check email daily.

Preparation: Students are expected to come to all classes prepared, with assignments complete, even if they have been absent.

Electronics: Students are expected to keep all phones and other personal electronics away/off during class. Calculators and laptops being used for class work will be acceptable.

Attendance/Participation: Students are expected to attend every class, to be on time for class, and to stay for the entire class period. Students who miss class are expected to complete the day's work and stay on schedule. Attendance is very important in this course. The only excused absences will be those due to required participation in university-sanctioned events such as athletic competitions, musical performances, and class trips. Students are expected to participate in all class activities, including individual work, group work, and work shared with the rest of the class. Full class participation involves bringing all relevant materials, staying on task, contributing to group activities, fostering a positive learning environment, answering questions when called upon by your instructor, and keeping all non-essential electronic devices away. *Sometimes you may think that you don't have time to attend class due to other matters, but past experience has shown that students who miss class actually spend far more than 50 minutes making up what they missed.*

A portion of class time will be spent working in small groups. The benefit of discussion while working in small groups to develop and use mathematical concepts has been shown to increase success rates. Brain research has shown that sharing multiple viewpoints and verbally articulating questions and answers strengthens the connections your brain makes between concepts. Strong connections improve your ability to recall and use concepts. Even if you think you already understand a concept, explaining your understanding to others benefits others while strengthening your own understanding. If you ask a question of your group or class, you are providing an opportunity for good discussion, so don't be shy about asking questions! The only bad question is one that is left unasked!

COVID-19 Safety Procedures

The University of Montana is requiring mask usage in all classrooms and laboratories regardless of vaccine status. New cases of COVID-19, predominately caused by the Delta variant of coronavirus, are increasing in Missoula County and across Montana. The University of Montana in following the Missoula City-County Health Department guidance recommends all individuals (regardless of vaccine status) also voluntarily wear a mask indoors and get vaccinated to help slow the spread of COVID-19. Because the conditions, rules, guidance, and recommendations surrounding the COVID-19 pandemic continue to evolve rapidly, these guidelines are subject to change. You are encouraged to stay up-to-date with the most current COVID-19 guidance using the resources listed at the end of these guidelines.

- If you feel sick and/or are exhibiting COVID-19 symptoms, please don't come to class and contact the Curry Health Center at **(406) 243-4330**.
- If you are required to isolate or quarantine, you will be supported, and it is the hope to ensure continued academic progress.
- Where social distancing (maintaining consistent 6 feet between individuals) is not possible, specific seating arrangements will be used to support contact tracing efforts.
- Class attendance and seating will be recorded to support contact tracing efforts.

Please refer to UM's Coronavirus [student information page](#) for more information and resources.

Diversity, Equity, and Inclusivity

Missoula College values the diversity of its students, faculty, and staff as an essential strength that contributes to our shared educational mission. Students of all backgrounds and perspectives are recognized and respected in this class. Course content and activities are intended to honor diversity of gender, sexuality, ethnicity, race, culture, religion, age, disability, socioeconomic status, and all dimensions of diverse human experiences and their intersection. Please notify your instructor if components of this course present barriers to your inclusion. Students can also reach out to Dr. Salena Beaumont Hill in the [Office of Inclusive Excellence for Student Success](#), which provides student support for BIPOC and LGBTQ+ students and student groups. To explore making a formal report about discrimination or harassment, please visit the [Equal Opportunity / Title IX office](#). For counseling or advocacy related to discrimination, please visit [SARC](#).

Resources:

Student Hours: My student/office hours are for you to seek direct help from me. I am available during all announced hours as well as other times by appointment. Please come see me with any concerns you have during the semester, especially if there is something going on that is having an impact on your ability to succeed in the class. You can also come see me during these hours

for help on math, just as you would get help in the math lab. Don't wait until you are way behind to get help! It is strongly recommended that you communicate with me as much as possible so that we can work together to get you through the course successfully.

Free tutoring is available on both the Mountain and River Campuses; links and hours will be announced as soon as they are provided.

Student: As a student, you may experience a range of challenges that can interfere with learning, such as health: strained relationships, increased anxiety, substance abuse, feeling down, difficulty concentrating, and/or lack of motivation. These mental health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. Counseling is available and treatment does help. The professional staff at Curry Health Center offers free confidential counseling to full-time students. I am always happy to help you find the resources you need.

A Statement on Digital Access and Equality:

Digital devices (like laptops and cell phones) are becoming increasingly important to success in college. In this course, you may need digital devices to access readings, complete and submit written assignments, complete online quizzes, verify your attendance, take in-class polls, coordinate with other students regarding group projects, complete and submit group projects.

I recognize that some students are unable to afford the cost of purchasing digital devices and that other students rely on older, more problem-prone devices that frequently break down or become unusable. I also recognize that those technology problems can be a significant source of stress for students. Given those challenges, I encourage students to contact me if they experience a technology-related problem that interferes with their work in this course. This will enable me to assist students in accessing support.

Here is some information in case you or another student you know faces challenges securing food or housing. There are some campus resources that might be helpful:

Food Pantry Program: UM offers a food pantry that students can access for emergency food. The pantry is open on Tuesdays from 9 to 2, on Fridays from 10-5. The pantry is located in UC 119 (in the former ASUM Childcare offices). Pantry staff operate several satellite food cupboards on campus (including one at Missoula College). For more information about this program, email umpantry@mso.umt.edu, visit the pantry's website (<https://www.umt.edu/uc/food-pantry/default.php>) or contact the pantry on social media (@pantryUm on twitter, @UMPantry on Facebook, um_pantry on Instagram).

ASUM Renter Center : The Renter Center has compiled a list of resources for UM students at risk of homelessness or food insecurity here: <http://www.umt.edu/asum/agencies/renter-center/default.php> and here: <https://medium.com/griz-renter-blog>. Students can schedule an appointment with Renter Center staff to discuss their situation and receive information, support, and referrals.

Monday	Tuesday	Wednesday	Thursday	Friday
Jan 17 Martin Luther King Day	Jan 18	Jan 19 Intro	Jan 20	Jan 21 1.1
Jan 24 1.2	Jan 25	Jan 26 1.3	Jan 27	Jan 28 catch up/work day
Jan 31 1.4	Feb 1	Feb 2 1.5	Feb 3	Feb 4 catch up/work day
Feb 7 Quiz Ch 1	Feb 8	Feb 9 2.1	Feb 10	Feb 11 2.2
Feb 14 2.3	Feb 15	Feb 16 3.1	Feb 17	Feb 18 catch up/work day
Feb 21 President'sDay	Feb 22	Feb 23 3.2	Feb 24	Feb 25 3.3
Feb 28 Quiz Ch 3	Mar 1	Mar 2 4.1	Mar 3	Mar 4 4.2
Mar 7 4.3	Mar 8	Mar 9 catch up/work day	Mar 10	Mar 11 Quiz Ch 4