M 143-800: Finite Mathematics (4 credits)

Location and Meeting Times: Online

Instructor Information: Don Gayan Wilathgamuwa
LA 841
406-657-2920
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http://www.msubillings.edu/mathfaculty/wilathgamuwa/

Office Hours: M/W/F 10:00 -11:30 (LA 841)
Or by appointment

Course Goals and Purpose:
• Present an overview of non-statistical mathematical ideas and methods applicable to the
management, life, & social sciences.
• Present relevant and representative examples illustrating the ideas and methods referred
to in the previous goal.
• Enhance critical thinking and problem-solving skills.

Learning Outcomes:
Upon successful completion of this course, the student will be able to:
• Understand linear functions, linear inequalities and apply them to solve real-world
problems
• Solve systems of linear equations by a variety of methods
• Graph linear inequalities and solve linear programming problems graphically
• Solve mathematics of finance problems, including the computation of simple, compound
interest, present, future value of annuities, and amortization of loans
• Construct truth tables and equivalent statements involving compound or conditional
statements and analyze arguments with quantifiers
• Understand nonlinear functions and apply them to solve real-world problems
• Understand the definition of the derivative and calculate derivatives

Text: Finite Mathematics & Calculus with Applications 10th Edition, Lial, Greenwell, and Ritchey,
Bundled with MyLab.

Prerequisite: M 095 or equivalent

Course Outline:
• Chapter 1: Linear Functions – section 1 and 2 only
• Chapter 2: Systems of Equations and Matrices- section 1, 2, & 3 only
• Chapter 3: Linear Programming: The Graphical Method
• Chapter 5: Mathematics of Finance
• Chapter 6: Logic
• Chapter 10: Nonlinear Functions
• Chapter 11: The Derivative
• Chapter 12: Calculating the Derivative
IMPORTANT: If you will be out of town for sports, work or whatever and you see that a quiz or an exam is coming, you MUST consult with the instructor to determine if you can take the exam before you leave. You must plan your schedule. You will be held responsible for taking your quizzes and exams on or before the scheduled date.

Registration: You will access the online homework and exams by first registering at the following site: [http://pearsonmylabandmastering.com/](http://pearsonmylabandmastering.com/)

Please read [Student Registration Handout](#) for more information.

Note:
- If you have only the textbook, you can purchase a Student Access Code online as shown in the registration process for about $90.
- If you are retaking the course, you may be able to reuse your previous access code. Please contact Pearson for more information.
- You **must use your name** (as appeared in the MSUB system) in the registration process. If you already have an account with a different name in the Pearson MyLab website, you must inform me before the final exam. Otherwise, you will receive an “F” grade for the course.
- If you have technical problems with Pearson website call: 1-800-677-6337.

Homework: All homework will be taken at the above MyLab website. Click on the SIGN IN button located on the right-hand-side. Give your Username and Password. Click on the M 143-800 link. Click on the Assignments button located on the left-hand-side. Click on the appropriate Homework Chapter link located under the Assignment.

Note: These graded homework problems can be taken an unlimited number of times. Your work is saved automatically when you leave the homework site.
Quizzes and Exams: Quizzes and Exams will be online in MyLab website. Click on the Click on the Assignments button to access an exam.

<table>
<thead>
<tr>
<th>Topics covered in M 143-800 online</th>
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| EXAM 1 | Chapter 1 (sections 1, and 2 only)  
         | Chapter 2 (sections 1, 2 and 3 only) |
| EXAM 2 | Chapter 3  
         | Chapter 5 |
| EXAM 3 | Chapter 6  
         | Chapter 10 |
| EXAM 4 | Chapter 11  
         | Chapter 12 |

Sample Tests and Quizzes in MyLab: Sample tests and quizzes can be taken for practice or to build your study plan. Sample tests or quizzes do not affect your grade.

Study plan in MyLab: Study plan exercises, Chapter pre-tests, Chapter post-tests and Chapter Review Quizzes will not be countered for the final grade. You can use these questions for your practice. It is not mandatory to complete these questions. Only exams (1 to 4), quizzes and chapter homework assignments will be countered for your final grade.

Gradebook: Your homework and exam grades can be viewed by clicking on the Gradebook button in MyLab.

Calendar: The calendar for this course can be viewed by first clicking on the Calendar button.

Incomplete: No Incompletes will be given unless requirements as per student handbook are met.

Tutoring: Free math tutoring sessions (onsite and online) are available in the Academic Student Center. For more information, go to http://www.msubillings.edu/asc

You are advised to make use of this opportunity.


Financial Aid and Scholarship: Dropping a course, getting an incomplete, or getting a Failing/lower grade may affect your scholarship or your financial aid. For more information, go to:

http://www.msubillings.edu/finaid/
Memo from Academic Support Center and Disability Support Services

Students with Disabilities
MSU Billings is committed to providing equal access. If you anticipate barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure your full participation in the course. If you determine that disability-related accommodations are necessary, please contact Disability Support Services (657-2283; located in Room 135 in the College of Education). We can then plan how best to coordinate your accommodations.

Academic Support Center (ASC)
University Campus ASC lab is located in the Student Union Building (SUB) and is open Monday thru Thursday 8:00 a.m. to 9:00 p.m., Friday 8:00 a.m. to 5:00 p.m. Online tutoring hours for math and writing will be Sunday thru Thursday from 8:00 p.m. to 10:00 p.m. City College Academic Support Center (ASC) lab is open Monday-Friday from 8:00 a.m. to 5:00 p.m. The ASC is located on the west side of the commons in the “Learning Commons” area in room A017. Tutoring will be available by appointment. Please inquire within about subject and tutor availability or ask Rebekah Reger at 406-247-3083.

Drop-In tutoring is offered Mon-Fri from 10am-3pm at University Campus in MATH (088, 095, 098, 105, 108, 111, 114, 121, 143) and WRITING with evening tutoring available (subjects will vary).

Further Information

1. If you live in or near Billings and if you can't figure out your calculator, the Academic Student Center could help you (it is located in the old Computer Annex just south of the SUB). Also, the ASC has web pages posted (below) with excellent and easy to follow instructions for various models of calculators. The site is located at: http://www.msubillings.edu/asc/resources/math/xgraphingCalculators.htm

2. This course is not designed to be easy. Rather, it is designed to be academically rigorous, intellectually challenging, and fair. It will require time and energy to read and reflect on the text and homework and discussions. Generally, when students work hard, good grades follow.

3. Realize that you are developing a set of personal habits and attitudes that will shape your professional life. To be an effective student, you must be enthusiastic about what you are doing. I expect your work to reflect a level of creativity and risk taking. Look for ways to use questions and assignments to help deepen your understanding of concepts that you read about.

4. Some of you will face personal situations during this semester that will rightfully demand more attention than this class, and will not allow you to be mentally in class. Whenever possible, accommodations that are fair to you will be made if I am informed in a timely manner before deadlines.
6. For both a student and a teacher there is no substitute for preparation. I expect you to stay current in your readings and other assignments. You should plan on spending time each and every day studying these concepts. Some assignments will require more of your time than others.

7. As college students, you should be very familiar with the requirements for academic integrity. Although discussing ideas from the class with others is both productive and encouraged, I expect answers on your exams to be your own independent work. Students who cheat on class assessment work will meet with disciplinary action, including but not limited to a failing grade in the course. For further information, consult the MSU-B student handbook [http://www.msubillings.edu/vcsa/code_of_conduct/part_9.htm#b](http://www.msubillings.edu/vcsa/code_of_conduct/part_9.htm#b).

8. An Incomplete (grade) is given only when students have attended for at least three-fourths of the semester but have been prevented by circumstances beyond their control from completing all the requirements of the course. The student must provide adequate evidence to the instructor as to the reason why they were unable to complete the requirements of the course. An Incomplete must be made up within one calendar year or the grade will revert to an F. In general, to make up an incomplete for this class, the student must retake the course and will be required to submit all material required by the new instructor of a regular student. No extra credit is offered.

9. Students with disabilities, whether physical learning, or psychological, who believe that they may need accommodations in this class, are encouraged to contact Disability Support Services (DSS) as soon as possible to ensure that such accommodations are implemented in a timely fashion. Please meet with DSS staff to verify our eligibility for any classroom accommodations and for academic assistance related to your disability. Disability Support Services is located in the Academic Support Center. The DSS staff can be reached at 406-657-2283 in the Academic Support Center.

Frequently asked questions:

1. **How do I contact my instructor?**
   a. You can contact your instructor via email: don.wilathgamuwa@msubillings.edu
   b. You can use “ask my instructor” links in MyLab
   c. D2L Email
   d. In every email, use the following format for the heading “M 143-800-Your Name”
   e. Telephone: 406-657-2920

2. **How does the instructor contact students?**
   a. I will always send my messages/updates/information through D2L email. So please make sure that you log in to D2L system frequently and read all my emails carefully and entirely.

3. **Where can I find my course material?**
   a. Chapter content in Pearson MyLab
   b. D2L content [http://www.msubillings.edu/it/elearning/D2LLogin.htm](http://www.msubillings.edu/it/elearning/D2LLogin.htm): Syllabus and information, Sample problems and answers, Free online resources
   c. Textbook and Student solution manual
d. For more information: please read “Where can I find the information” handout

4. **How long does it take to get a reply from my instructor?**
   a. Usually, I respond to your emails within 24 hours. In case if you do not get a reply within 24 hours, please verify whether you typed my email address (don.wilathgamuwa@msubillings.edu) correctly. You can also call me at 406-657-2920.