

Course Syllabus: Contemporary Mathematics College of Science and Mathematics Math 1053 Section X20 January 17, 2023 through May 12, 2023

Contact Information

Instructor: Dr. Dawn Slavens, Ph.D.

Office: 118-L Bolin Science Hall

Office hours: Mon. 9-11 AM; Tues. & Thurs. 2 – 3 PM; Wed. 3 - 4 PM. The office hours above are dedicated times when I will be in my office and fully available to all of my students to answer questions over course content. Students are welcome to stop by my office, without an appointment, during any of the above hours. As this is an online class, I expect that many students in this class are unable to physically come to my office to ask questions over course content. Therefore, during the hours above any student in this class may call me (see phone number below) or send an email to me (see email address below) to see if I am available (i.e., not with another student). If I am not helping another student, then we can meet virtually through the Zoom Meeting Link that is on the Course Homepage within D2L. You may also make an appointment with me to meet through Zoom at a time different from the hours listed above. To do this, simply send me an email requesting an appointment. In the email, please give your availability (day(s) and times) for the appointment. Please include as much availability as you can so that we can get an appointment set up as soon as possible. Please do not hesitate to ask to meet with me outside of my official office hours. I am glad to meet with any student by appointment at an hour that works for both me and the student.

Office phone: (940) 397-4013 (If I do not answer, please leave me a message so that I can get back to you, or please send me an email.) E-mail: dawn.slavens@msutexas.edu

Course Description from MSU Catalog

A survey of the use of mathematics in the modern world. Topics include: theory of elections and apportionment, graphs and networks, and statistics

Textbook & Instructional Materials

Required: MyLab Math for the text Excursions in Modern Mathematics, tenth edition, by Peter Tannenbaum. These are digital materials required for this course and are part of the Courseware Access and Affordability Program at MSU Texas. Students are charged for these required course materials on their student account with the Business Office. Information about the price of the materials through the Courseware Access and Affordability Program is included as a newsfeed item in the D2L course. In addition, any student who wishes to opt-out of the Courseware Access and Affordability Program and purchase the required digital course materials on their own may do so. Opt-out instructions will be sent on the second day of classes by the MSU Bookstore to your my.msutexas.edu email address. Please contact the MSU Bookstore (940) 397-4303 if you have any questions about the Courseware Access and Affordability Program or the opt-out process. Please keep in mind that the cost of the materials purchased through the Courseware Access and Affordability Program is supposed to be the lowest possible price for the course materials.

An easy to use electronic copy of the textbook is available in the MyLab Math digital materials.

For students that wish to obtain a physical copy of the textbook, that can be done from the D2L Content Browser by selecting MyLab Math -> Purchase Options. Another option for obtaining a physical copy of the textbook is to do an internet search for the 9th edition of Excursions in Modern Mathematics by Peter Tannenbaum. When doing such a search, I saw several copies available on ebay at a price much less than what the publisher will rent or sell the book for, and there is no content change between the 9th edition and the 10th edition of the text. The only change is that the page numbers for reading may be off by one or two pages. The only reason a student may want a paper copy of the book is if they prefer to read from a physical book over an eText.

Important Information about Course Format and Pacing

Although the format of this course is web-based, the content, goals, and objectives remain the same as a course taught in a traditional classroom setting. To be successful in this online course it is necessary to spend sufficient time working through the modules/folders within D2L. It is within these modules/folders that you will be given a sequence of tasks (readings and watching videos) for learning the course content. It is through reading the pages in the modules/folders, the assigned eText readings, and watching assigned videos that you will begin to develop an understanding of the mathematical concepts needed to solve the problems encountered in the section homework assignments. For each section covered from the textbook, after reading and watching the assigned videos, you will be ready to start working the homework problems for the section. Your goal, as you complete the homework, should be to develop mastery of the content within that section of the textbook. If you discover, while working the assigned homework problems, that you have questions, it is important that you seek answers to your questions. For each homework problem there is an option to "Ask My Instructor". Clicking this will result in sending Dr. Slavens an email that will contain a link to the specific problem you are working on. Within the email, it is important to include exactly what you have done to arrive at your answer to the problem or include specifically what you understand about how to solve the problem and where you think you are confused or unsure. Taking a picture of your work and sending it as an attachment in an email can help Dr. Slavens understand where you need help with understanding. The more Dr. Slavens understand about how you are approaching the solution of a problem, the more she is able to provide guidance to you. Remember (See Office hour section of syllabus) that you can also request to meet with Dr. Slavens through Zoom whenever you need help. So if you feel that you cannot reasonably ask your question in an email, then you should request meeting with her through Zoom or in her office. It is not acceptable to send an email that says "How do I solve this problem?" An email question needs to be a specific mathematical question, one in which the sender acknowledges what mathematics they understand that pertains to the problem they are asking about, and as well as what is confusing or unclear to the sender. If Dr. Slavens is unclear about what question of mathematics a student is struggling with when sending her a question through email, she will respond suggesting that an appointment be made so that she and the student can talk about the mathematics related to the problem the student is asking about.

It is important to work on this course frequently each week and in small doses, one to three hours at a time. Working on one or two sections on a given day, then repeating this daily or every other day, is much better than trying to work through a whole week's worth of material in one nine-to-twelve-hour session. In many chapters, sections within a chapter build upon one another. You may need time to develop understanding of one section before moving on to the next section. As a rule of thumb, do not go more than a couple of days without logging in and doing some work within the course. There is a week-to-week schedule for completing the homework, guizzes, and unit tests. This week-toweek schedule can be found in the folder within D2L that contains this syllabus. Print the week-to-week schedule and refer to it regularly. Each homework assignment and chapter guiz has an on-time due date and a final availability due date. My recommendation is that you aim to complete each assignment by the on-time due date. These due dates will help you pace yourself through the course. For each assignment, the final availability date is generally two to five days after the on-time due date for the assignment. Therefore, if you miss an on-time due date then you will have until the final availability due date to complete the assignment. The additional day or days given beyond the due date for an assignment to be completed are to accommodate students during a brief period of illness or other unplanned emergent situation that has resulted in getting a little behind in the course. In a case of severe illness or unplanned personal emergent situation that results in not being able to complete an assignment by the final availability date, as soon as possible a student should

reach out to Dr. Slavens through email and explain the situation as well as include a request of a reasonable length time extension to complete the work. A request for an extension that is made more than two days after the final availability date will be denied.

Once the final availability date for a homework assignment has passed a student may access the homework assignment through the MyLab Math Gradebook that is located in the MyLab Math folder within D2L and practice problems within the assignment without changing their grade on the assignment.

It is strongly recommended that you work the problems in the homework assignments within a chapter before taking the quiz over the chapter. You may also wish to review your homework before taking a quiz. When taking a chapter quiz, you will be allowed access to your completed homework. Your goal should be that you do not need to refer to your completed homework often when taking a quiz, but since it is an option, keeping a notebook containing your written work for solving problems within homework assignments is recommended.

The course is set-up in D2L by weeks. The first two weeks of the course content and assignments are available now. Next week, week 3's content will be added, on Monday of the third week of classes, week 4's content will be added, and this process will continue throughout the semester. In this way, you are always allowed to work ahead of schedule by one week. The only exception is with Unit Tests. Unit Tests must be taken during the three day window shown on the week-to-week schedule for each test.

Course Alignment with Textbook

You will be covering ten (really 9.5) chapters from the textbook (included in MyLab-Math as an eText). For each chapter there will be multiple homework sets and a chapter quiz. The ten chapters are divided into three units. At the end of each unit there will be a unit test.

The Three Units Covered in the Course

Unit 1 is titled *Social Choice*. This unit includes Chapters 1 through 4 of the textbook. Unit 2 is titled *Statistics*. This unit includes Chapters 15 through 17 of the textbook. Unit 3 is titled *Management Science*. This unit includes Chapters 5 through 7 of the textbook.

Homework Help within MyLab-Math

As you work through homework within MyLab-Math, for many problems you can access *question help* from the bottom of the page showing the problem you are working on. The *question help* generally includes features like *Help Me Solve This, View an Example, Textbook, Calculator* and *Ask My Instructor*. You should always have completed the learning tasks in the D2L module/folder corresponding to a section of homework prior to working the homework problems over the section content. In this course, you are to learn algorithms for solving

many different problems motivated by real world scenarios. You must precisely follow these algorithms to consistently obtain correct answers to the questions asked. Do not use the Help Me Solve This or View an Example help features as a substitute for completing the learning tasks within the section module/folder. Using Help Me Solve This or View an Example as your way to learn the course content will result in a superficial understanding of the algorithmic processes used to solve the problems. A superficial understanding will not be sufficient for achieving passing chapter guiz and unit test scores. The chapter guiz and unit test scores make up 90% of your course grade. Therefore, you must have a comprehensive understanding of the algorithmic processes used to solve the problems to achieve a passing grade in the course. When working homework, do not be overly concerned with getting every answer correct on your first attempt, as you will be able to work a similar problem, and by working the similar problem correctly, will receive credit for the problem. Using View an Example to help you answer a homework problem should be done only after you have tried working the problem at least once on your own. Even then, before using View an Example you should go back to the textbook to re-read any explanation offered for solving the problem or go back to a video and re-watch a video to review the concepts needed for working the problem. Using *View and Example* frequently to work homework problems may get you a good homework score; but will likely not translate to developing a comprehensive understanding of course content. A comprehensive understanding of the course content is needed to do well on quizzes and exams. If, at any time, you feel like you need help understanding, reach out to me. You can do this by sending an email and asking a specific question around whatever you find to be confusing within a given problem. As mentioned previously, it is helpful to send the email by clicking on Ask My *Instructor*, as this will let me know exactly what problem you are working on. In addition to the email sent by clicking on Ask My Instructor, sending a follow-up email with an attachment showing your work for the problem can help me identify where you have made an error. If you do not send me enough information about the method you are trying to use to solve the problem, I will respond to your email asking for more information about how you are approaching the solution to the problem. Another way to get help is to send an email requesting to meet with me through Zoom. This will allow for a more thorough discussion of the course content that you may be struggling to understand.

Quizzes

Chapter quiz questions are very similar to questions within the chapter homework; however, the help features are not available and there is a time limit for completing the quiz. The time limits vary, generally between 40 minutes and 75 minutes, depending on the quiz. You are allowed to take each chapter quiz twice. When you take a chapter quiz more than once, the higher grade will be used when computing your course average. Most quizzes will be given through MyLab-Math with no proctoring, but some will require proctoring with Pearson's Respondus Monitor and Lockdown Browser. When proctoring with Respondus Monitor and Lockdown Browser is required, be sure to follow the instructions given within the environment check video, as not doing so may result in you having to have all unit tests proctored by ProctorU, which will cost you at least \$25 per proctoring session. In addition, one- or two-chapter quizzes may be given within D2L and require the use of D2L's Respond's Monitor and Lockdown Browser. There is a syllabus quiz over the content of this syllabus within D2L under Assessment and then Tests. The syllabus quiz is due by 11:59 pm on Friday, January20th.

Unit Tests

All unit tests (there will be a total of three) will be proctored. Be aware that online options for proctoring an exam result in an additional expense for the student and require a strong steady internet signal as well as a webcam. Proctoring of tests may be done through any of the following methods: Respondus Monitor and Lockdown Browser within D2L, Respondus Monitor and Lockdown Browser within MyLab-Math, and the independent service ProctorU. For each test, Dr. Slavens will chose the proctoring method. When ProctorU is chosen as the proctoring method, the student will have to pay a fee of approximately \$25 to \$35 to ProctorU. In the past, Dr. Slavens has used ProctorU to proctor all three of the unit tests. However, this semester she will use ProctorU no more than once, with the exception that if a student does not adequately follow all directions given when taking an exam proctored with Respondus Monitor and LockDown Browser, a student may then be required to take more than one unit test proctored through ProctorU. Also, when Respondus Monitor and LockDown Browser in D2L or MyLab-Math is the selected method of proctoring, if a student experiences technical issues with this software and is unable to resolve their issues, the student will be required use ProctorU instead, which will require that the student pay the proctoring fee to ProctorU.

For each unit test, you may be required to upload your work into a Dropbox folder within D2L. Preference would be that the upload is one pdf document. Adobe Scan is a free mobile app that can be used to create the pdf. The pdf can then be uploaded into Dropbox through the Brightspace Pulse app from your phone. This app is not required, but is recommended.

ProctorU

ProctorU is a live online proctoring service that allows you to take your test from the comfort of your home. ProctorU is available 24/7, however you will need to schedule your proctoring session at least 72-hours in advance to avoid any on demand scheduling fees. Creating a ProctorU account is very simple. All you will need to do is visit <u>ProctorU</u>. From there click on Test-Taker and browse the knowledge base to learn about ProctorU. From the link "This is my first time using ProctorU. How do I get started?" you will be able to access the Test-Taker Resource Center. It is important that you test your equipment with ProctorU, done through a link on their website, prior to your scheduled time to take a unittest. In order to use ProctorU, you will need to have a high-speed internet connection, a webcam (internal or external), a windows or apple Operating System, and a government issued photo id. ProctorU does not support chromebooks, cell phones or ipads.

The cost for using ProctorU to take a 2-hour exam is between \$25 and \$35.

MyLab-Math Technical Support

If you experience technical difficulties with MyLab-Math then you will need to reach out to Pearson through their online support at <u>support.pearson.com/getsupport</u>. If you do have technical issues and must reach out to Pearson, please let me know. Although any technical issues will need to be addressed by you through Pearson Support, if you do not get satisfaction with whatever technical issues arises, please let me know the issue and what you have tried. If need be, I will reach out to our Pearson book representative on your behalf to try to get you the help that is needed.

Calculator Requirement

Each student will need to have a calculator. For the most part a four-function calculator that has a square root key will be sufficient. However, within Units 2 and 3 it will be useful to have a calculator with a factorial key as well as permutation and combination keys. These features are on many scientific calculators, such as the TI 30X IIS calculator which sells for about \$15 through Amazon. You will not be allowed to use a calculator on a phone when taking a unit test.

Student Handbook

Students should refer to the current MSU Student Handbook for university policies on academic dishonesty, student rights, and activities. You can access the handbook by clicking on <u>Student Handbook</u>. One policy within this handbook concerns Instructor Drops, which allows an instructor to drop a student for various reasons, including failing to meet class assignments. In this class, not taking a unit test, not completing more than 20% of the homework assignments or not completing more than 2 of the chapter quizzes will be considered as failing to meet class by the instructor with a grade of WF or F. An assignment will considered "in your score is less than 50% on the assignment.

Academic Misconduct

All work that you submit for this course that contributes to your course grade must be your own work. Any evidence that you submitted work that is not your own is considered an act of academic dishonesty. An act of academic dishonesty will be reported to the university and will result in one of the following academic sanctions:

- Receiving a 0 on the homework, quiz, or exam.
- Receiving a 0 for the entire quiz grade for the semester (21%) or the entire homework grade for the semester (10%).
- Receiving an F in MATH 1053 that will remain permanently on your transcript and within your MSU GPA.

On homework assignments, students may discuss the problems among themselves, as well as with any other person that is willing to discuss the problems, but each student is expected to work out and understand the solutions prior to submitting them online. The university's academic dishonesty policy can be found in the <u>student handbook</u>.

Grading

The final grade for the course will be determined by a combination of homework, quizzes and unit tests using the grading scale below.

Table 1: Weight allocated to each assessment type.

Assignments	Weight
Homework	10%
Chapter Quizzes	21%
Unit Tests	69%

Table 2: Course Grades.

Grade	Weighted Average from Table 1
А	90 - 100%
В	80 - 89%
С	70 – 79%
D	60 - 69%
F	Less than 60%

Important Dates

Last Day to drop with a grade of "W:" 4:00 p.m. March 27, 2023 Refer to: <u>Petition for Course Drop</u>

Services for Students with Disabilities

In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order to provide appropriate services, and each request will be individually reviewed. For more details, please go to <u>Disability Support Services</u>.

Notice

Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor

College Policies

Campus Carry Rules/Policies Refer to: <u>Campus Carry Rules and Policies</u>

Smoking/Tobacco Policy

College policy strictly prohibits the use of tobacco products in any building owned or operated by WATC. Adult students may smoke only in the outside designatedsmoking areas at each location.

Alcohol and Drug Policy

To comply with the Drug Free Schools and Communities Act of 1989 and subsequent amendments, students and employees of Midwestern State are informed that strictly enforced policies are in place which prohibits the unlawful possession, use or distribution of any illicit drugs, including alcohol, on university property or as part of any university-sponsored activity. Students and employees are also subject to all applicable legal sanctions under local, state and federal law for any offenses involving illicit drugs on university property or at Universitysponsored activities.