College of Sciences/Department of Mathematics

MATH 1020<u>A</u>:Contemporary Mathematics--<u>FALL 2022</u>
Section <u>A</u>: <u>on-line</u>,   Course ID (CRN #): <u>1581</u>

INSTRUCTOR
Yi Wang, Ph.D., Professor
Room 213C, Goodwyn Hall
Email: ywang2@aum.edu
Homepage: http://sciences-srv.aum.edu/~ywang
Phone: 334.244.3318

Office hours: 1) Email office hours: M/T/W/R: 4:00pm-5:00pm If you email me, your email will be replied ASAP unless prevented by unexpected circumstances. Otherwise your email will be replied **within two-working days**.

2) Zoom meeting by appointment. Please email me for an appointment. Instruction here:
[Join from PC, Mac, Linux, iOS or Android: https://auburn.zoom.us/j/4590335712?
pwd=OFpoWXdYVXVzYXNLWUVncXhXWFIwZz09
Password: 042920
Connect using Computer/Device audio if possible.

Or Telephone: Meeting ID: 459 033 5712
Dial: +1 301 715 8592 (US Toll)
or +1 312 626 6799 (US Toll)
].

Communication: Communication is extremely **important** for an on-line course. **Important!** Please deliver your questions using the regular aum.edu email. Students' questions via email system will be answered within **two working days. Emails requesting extension time for quizzes and/or exams are strongly discouraged and will not be answered. Emails requesting extra credits at any time will not be answered!**

Catalog Description: Primarily for students not continuing to calculus. Set theory, linear equations and inequalities with applications, geometry, consumer math, probability, and descriptive statistics. Additional topics as time allows.

Course Rationale: MATH 1020 satisfies the university's core mathematics requirement. It prepares students for a variety of non-STEM career paths by developing their quantitative literacy and critical thinking skills using mathematical applications encountered in everyday life.

Learning outcomes/Course Objectives: Upon successful completion of this course the student will demonstrate an understanding of and ability to apply each of the following topics (time permitting):

Sets and Venn Diagrams

Linear Equations and Inequalities

Selected Topics from Geometry

Loans, Interest, and Mortgages

Basics of Probability and Statistics

Course Credit Information: MATH 1020 is a three-credit hour course.

PREREQUISITES: A# in MATH 0703, C# in MATH 0803 or C# in MATH 0902, or an appropriate score of ACT or ALEKS.

Textbook:A Survey of Mathematics with Applications with Integrated Review, 11th Edition. Author(s):Angel, Allen | Abbott, Christine | Runde, Dennis; published by Pearson, 2021. Print ISBN-13: 978-013-574046-0; MyLab: 9780135740576. A print copy is not required, however an on-line access code is required be purchased to complete the assignments in MyMathLab at Pearson.com. This course will use the AUM Inclusive Book Access Program for students to purchase an access code.

MATH 1020 is part of the AUM Inclusive Access Program which provides instant access to the digital material needed for this course on the first day of class. You have a trial period (typically two weeks in a Fall/Spring semester, or one week in a summer semester) to decide whether or not you want to continue to use the digital course material provided or you can OPT-OUT and source the course material through alternative methods. After the trial period, those students choosing to remain in the AUM Inclusive Access Program will be charged by the All Inclusive Access book price (typically lower compared to the retail price) to your student account. For more information on the AUM Inclusive Access Program and directions on how to OPT-OUT of the program, please visit the following link: https://aumbookstore.com/inclusive-access.

Here's the link to the Bookstore's Inclusive Access FAQ page: http://aumbookstore.com/inclusive-access.

Remember that opting-out of the AUM Inclusive Access Program does not remove you from your class. Opting-Out only removes your access to the digital course material provided for your class via the AUM Inclusive Access Program. Also, if you drop the class during the trial period, you will not be charged for the AUM Inclusive Access course material.

To participate the program, follow the AUM All-inclusive Book Access Procedures for Pearson textbooks below:

 Obtain a textbook access code: log into your Blackboard course page, and identify the link 'AUM Inclusive Book Access' typically by clicking on the link 'Start Here' on the left panel. If you cannot find the link 'AUM Inclusive Book Access', follow the instruction in the syllabus or contact your instructor. Then select the textbook of your course and follow the prompts to either acquire a book access code or opt-out of the AUM Inclusive Book Access Program. Here are videos on what the student journey will look like from Blackboard to RedShelf All Inclusive Book Access Program. If you have questions or need support please utilize RedShelf Solve Student Page or open a support ticket from the same site here. You can also email the Customer Experience team directly at iahelp@redshelf.com.

 Redeem the book access code to access the textbook and MyLab:

1)   Since the Pearson MyLab course was created from BB, you must redeem the code starting from BB. Do one of the following:

>   a.   Sign into Blackboard and enter your Blackboard course.

>   b.   Then do one of the following:

> ➢ Select any Pearson link in the Content area.

> ➢ Select **Tools** in the left navigation and **Pearson's MyLab & Mastering** on the Tools page.

> Next, select any course link in the top area of the Pearson's MyLab and Mastering Tools page.

> (This is not the case for this course) If the instructor does **not** create the PearsonMyLab course from BB, visit the Pearson page https://www.pearsonmylabandmastering.com/northamerica/. You will also need a course ID something similar to 'professor12345' from your instructor.

>   2)   Enter your Pearson account **username** and **password** to **Link Accounts**.

>   You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.

➢ If you don't have a Pearson account, select **Create (or Register Now** at the site https://www.pearsonmylabandmastering.com/northamerica/) and follow the instructions.

>   3)   Select an access option:

➢ Enter the access code that you obtained in **Step 1 above**.

➢ (Only if you have opted out the 'AUM All-inclusive Access Program' in **step 1**) Buy access using a credit card or PayPal account

>   **Do not select: get temporary access by selecting the link near the bottom of the page.**

>   4)   From the You're Done page, select **Go to My Courses**.

Technology Equipment Expectation: PC/Laptop (not Chromebook) +Webcam+Internet. Students who do not have their own equipment can use AUM open labs such those in Taylor Center or in the Library. It is the student's responsibility to make sure you have the basic technology to complete this course. **Students cannot use any excuse of technology to demand a special treatment. Such an excuse will not be accepted.**

Curtiss Course Evaluation period: Nov. 9-- Nov. 30, 2022

CALCULATORS: Essentially you only need a basic calculator that is capable of performing arithmetic and exponent calculation. A graphing calculator such as the TI-84 (TI-83) is acceptable. **However, calculators with CAS capability such as TI-89 or higher or similar are prohibited in all exams.** Please bring the calculator to all class meetings and exams. You may use the calculator for each test, but you will be required to show all work for the tests and if you rely on the calculator for solutions, you will get zero credit. You are here to learn mathematics rather to demonstrate your using a calculator and a calculator will be used only as an aid.

Blackboard:This course will use Blackboard http://bb9.aum.edu. Syllabus, lecture notes, class announcements, weekly schedule and updated grades will be posted at Blackboard.   It is the students' responsibility to check the information posted in Blackboard.

EXAMS in BB: There will be **a mid-term test and a   final exam offered in Blackboard**. The exams are given using Lockdown Browser + Respondus Monitor. The two exams must be taken **in a designated time frame** that shall be given by the instructor (see the schedule below). The maximum length of the time for the midterm exam is 120 minutes and for the final is **Two and half hours**. **Please DO NOT send emails requesting extension time for quizzes and/or exams. Such emails will not be replied. Students must have a webcam to take the test, either your own webcam or you can obtain one from AUM open lab. Again, nobody** should use any excuse of technology to demand a special treatment. Such an excuse will not be accepted.

Exams must be completed independently by the student him/herself. Violation of the policy will result in a `F'.

Using Lockdown Browser + Respondus Monitor for proctored exams: Midterm Exam and Final Exam

This course requires the use of LockDown Browser and a webcam for online exams. The webcam can be the type that's built into your computer or one that plugs in with a USB cable.

Watch this brief video to get a basic understanding of LockDown Browser and the webcam feature.

https://web.respondus.com/lockdownbrowser-student-video/

Download Instructions (for use in BB, students need to download and install the Lockdown Browser first and use the LockDown Browser to navigate to the test. BB will not prompt to download the LockDown Browser.)

Download and install LockDown Browser from this link:

https://download.respondus.com/lockdown/download.php?id=322612028

Once Installed

- Start LockDown Browser
- Log into Blackboard Learn
- Navigate to the test

Note: You won't be able to access tests with a standard web browser. If this is tried, an error message will indicate that the test requires the use of LockDown Browser. Simply start LockDown Browser and navigate back to the exam to continue.

Guidelines
When taking an online test, follow these guidelines:

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach
- Before starting the test, know how much time is available for it, and also that you've allotted sufficient time to complete it
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices
- Remain at your computer for the duration of the test
- If the computer, Wi-Fi, or location is different than what was used previously with the "Webcam Check" and "System & Network Check" in LockDown Browser, run the checks again prior to the exam
- To produce a good webcam video, do the following:
  - Avoid wearing baseball caps or hats with brims
  - Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move
  - If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete
  - Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

Getting Help
Several resources are available if you encounter problems with LockDown Browser:

- The Windows and Mac versions of LockDown Browser have a "Help Center" button located on the toolbar. Use the "System & Network Check" to troubleshoot issues. If an exam requires you to use a webcam, also run the "Webcam Check" from this area
- Respondus has a Knowledge Base available from support.respondus.com. Select the "Knowledge Base" link and then select "Respondus LockDown Browser" as the product. If your problem is with a webcam, select "Respondus Monitor" as your product

If you're still unable to resolve a technical issue with LockDown Browser, go to support.respondus.com and select "Submit a Ticket". Provide detailed information about your problem and what steps you took to resolve it

Pearson | MyLab |Math : This course will use Pearson MyMathLab as well https://www.pearsonmylabandmastering.com/northamerica/mymathlab/. Everyone must purchase an access code. There is an Ebook and many other learning resources that come with the access code. Instructions of how to sign-up this course at Pearson MyMathLab can be found by clicking on the link 'Pearson MyMathLab' on the left panel in BB and follow the instruction.

How to use MyMathLab:

1. You will need to complete all 'Quiz Me' assignments in the Study Plan, assigned homework, quizzes, and chapter tests in MyMathLab. For each chapter, there is a pre-chapter skill check quiz and a chapter test. There is also a study plan and a homework set for each covered section.   We will be covering the following sections in the order as given below:
2.1--2.3, 6.1--6.3, 6.5--6.8, 8.3, 10.1--10.6, 11.1--11.3, 12.1--12.6.

2. Each test or quiz will be available according to the schedule below outlined in the syllabus throughout the semester. For example, Chapter 2 Pre-chapter skill check quiz and homework set 2.1 will be open on Aug. 15, and Q2.2 will be open on Aug. 17, and so on. Each homework, test or quiz in MyMathLab allows unlimited attempts, and there is no time limitation to complete an assignment in MyMathLab. You can redo each assignment as many times as you want. But each assignment must be completed by a designated deadline that is indicated for that assignment. Please do not send me any email asking me for any exception of this rule. **Please understand, without practice or completing required assignments in MyLab, you will fail the class.**

3. **Here are the recommended procedures to work out each chapter:**

- 1) When you start a new chapter, first complete the **study plan Quiz Me** associated with the the **Chapter Skill Check -Quiz**, then complete the skill check quiz. For example, when you are ready to start Chapter 2, first practice and complete Quiz Me that is associated with Chapter 2 Skill Check Quiz, to do

this, click on the link "Study Plan" on the left panel, and then make sure the study plan is shown for the "Chapter 2 Skill Check Quiz", and then work on all the practices and Quiz Me. After you have done this, then take Chapter 2 Skill Check Quiz. To do this, click on the link 'Assignments' on the left panel, and start the appropriate Chapter Pre-Test. Remember you can take it as many times as your want before the deadline is up.

- 2) Study the Powerpoint lecture note of a new section. In Pearson MyMathLab, click on '**Video and Resource Library**' on the left panel, then select a '**Chapter**' and a '**Section**', and then select the '**Media Type**' '**PowerPoint**' and '**Video**', and then click on '**Find Now**'. Then you can open the Powerpoint lecture note and study it. You can also watch the videos for demonstrating each example.

- 3) Study each objective of a section by going to the '**Study Plan**'. Click on 'Study Plan' on the left panel, then you will see all the objectives listed under the section title. There is a study plan for each assigned quiz/test, for example, the very first study plan is for Chapter 2 Skill Check Quiz. Select a different Study Plan for a different quiz/test. For example, click on the little down arrow beside the button '**S**how Study Plan For' roughly on the upper left corner, and select the appropriate quiz/test, for example Chapter 2 Test. For each objective, there are two buttons '**Practice**' and '**Quiz Me**'. Click on '**Practice**', and start to work on each question. After enter or select an answer, Click on '**Check Answer**' at the bottom right corner. Then read the prompt/instruction in a pop-out window. If you need other help, click on the button '**Question Help**' on the upper right corner, and select an appropriate aid tool among '**Help me solve this**', '**View an example**', '**Text Book**', '**Video**', '**Animation**', etc. After you feel you have learned the new objective, Start '**Quiz Me**'. Again , remember you can redo '**Quiz Me**' as many times as you want. The '**Quiz Me**' assignments in the 'Study Plan' accounts for 40% of your overall course grade. **It's very important to complete all 'Quiz Me'**.

- 4) Go to the '**Assignments**', and select the homework set for a section, for example, 'Homework 2.1' for Section 2.1. Again, remember you can redo each assignment as many times as you want.

- 5) After you complete all assignment in a chapter, then take the **Chapter Test** by going to the '**Assignments**' Page. For example, after you have completed Homwork 2.1, Homework 2.2, and Homework 2.3, you can start the 'Chapter 2 Test'. Again, remember you can redo each test as many times as you want.

- 6) Move on to the next chapter.
- 7) Each assignment has a prior requisite to complete before you can start it. Such prerequisite sequences are built in the course. You will be prompted if you attempt to try an assignment but without completing the required prior assignments.

GRADES:
Here is a breakdown of the grade components:

Quizzes in MyMathLab......................................5%
Tests in MyMathLab...5%
Homemwork sets 30%
'Quiz Me' in the Study Plan in MyMathLab............40% (This is essentially your homework assignments)

Midterm test in Blackboard …………………......……..10%

Final in BlackBoard …….............................10%

Total points: 100%

If you get the following points you will receive

>90%…….........................A
>=86% and <90%…….....…...B+
>=80% and <86%……....…...B
>=76% and <80%……...…....C+
>=70% and <76%……...…....C
>=66% and <70%……...…....D+
>=60% and <66%……...…....D
<60%..................................F

Grades in the course will reflect students' demonstrated attainment of course objectives. I reserve the right to adjust these ranges downward or make appropriate scaling if necessary due to excessive difficulty of assignments or tests. Borderline cases will be considered according to the attendance, grades of all quizzes, mid-exams and grade of the final by the sole discretion of the instructor.

Online Resources on Blackboard
As you log into Blackboard, you will see the following resources posted.

Course Content. This is the main resource you find on Blackboard. The content is divided into chapters. The folder of each chapter contains:

- PowerPoint presentation (you must have Microsoft PowerPoint installed on your computer to view this),

- Video lectures from other sources (not from the publisher),

Announcements. Here announcements of the week will be posted.

Syllabus. Here the Syllabus is posted. The Syllabus can also be viewed from the "course Content" area.

My Grades. You can view your day-to-day grades and progress from here.

OTHER STUDYING RESOURCES:
1. Free Academic Support: All students have the opportunity to receive free academic support at AUM. Visit the Learning Center (LC) in the WASC on second floor Library or the Instructional Support Lab (ISL) in 203 Goodwyn Hall. The LC.ISL offers writing consulting as well as tutoring in almost every class through graduate school. The LC may be reached at 244-3470 (call or walk-in for a session), and the ISL may be reached at 244-3265. ISL tutoring is first-come-first served. Current operating hours can be found at www.aum.edu/learningcenter.

The Learning Center (LC) offers tutoring both in person or virtually, and is located on the 2nd floor of the library in the WASC area. At this center, you can schedule one-on-one tutoring sessions. You can walk in or visit http://www.aum.edu/tutoringapp to schedule a session. You can make a one-time 30 or 60-minute appointment, or have a standing appointment at the same time every week throughout the semester. As long as you show up for the standing appointment, it will remain for the entire semester. The LC's number is 244-3470 and is open from 9:00am – 7:00pm Monday – Thursday and Friday 10:00am – 2:00pm.

At the Learning Center, students can get help with a wide array of subjects such as writing (in any subject area), literature, history, accounting, economics, Spanish, statistics, math, and psychology.

The Instructional Support Lab (ISL) is located on the 2nd floor of Goodwyn Hall in room 203/202. The ISL phone number is 244-347. This is a drop in center open from 9:00am – 9:00pm Monday – Thursday, and 10am-2pm on Friday. No appointment is necessary. At the ISL, students can get help with math, chemistry, physics, biology, anatomy and physiology, and computer science courses. We have a big schedule board when you first walk in the door, which lists all of our tutors, when they work, and what

subjects they can tutor. You can consult that board to find availability or ask a front desk worker or a tutor for help.
Online tutoring is also available via a drop in chatroom. http://www.aum.edu/isl-chatroom

At the Instructional Support Lab, students can get help with math, chemistry, physics, biology, anatomy and physiology, and computer science courses.

We will also have an English and Math tutor this fall in The Nest on Tuesdays and Thursdays from 4:00pm – 6:00pm.

The WASC also has student success advisors who can guide you in how to be successful in college. Whether you're struggling with study skills, time management, or just navigating through your transition to AUM, our advisors have the tools and connections to help you make the most of your college experience!

2. Students may seek **technology assistance** from the ITS Help Desk located in the computer lab on the first floor of the Taylor Center. You may also call 334-244-3500 or email helpdesk@aum.edu.

SOME IMPORTANT POLICIES IN THIS CLASS:
1. There is **absolutely no** make-up for the homework/quizzes/worksheets. **Late work passing the given deadline is not accepted**. Missing test/exam: **No make-up test/exam is allowed.** A missing test/exam receives a grade of zero. **No exam will be given earlier than the scheduled time. Each quiz will be available for about a week for most of the cases. Please DO NOT send emails requesting extension time for quizzes and/or exams, such emails will not be replied.**
2. A reasonable excuse commonly refers to an institutional excuse, a doctor-signed excuse, or an excuse signed by some authorized people who are solely accepted by the instructor.
3. **Exceptions only are made at the sole decision of the instructor.**
        I do NOT give any extra credits whatsoever. Every student in the class are evaluated by the above grading policy. Emails requesting extra credits will not be answered!

HOW TO SUCCEED THIS COURSE?
In addition to my effort, your efforts are indispensable.
(1) To get a grade C, one is advised to spend **at least 1 hour** (depending on your background in mathematics) for each lecture hour in reviewing the lecture notes, doing the examples in the lecture notes and in the book, and doing **some** homework problems.
(2) To get a grade B, one is advised to spend **at least 1-2 hours** for each lecture hour in reviewing the lecture notes, doing the examples in the lecture notes and in the book, and doing **most** of the homework problems.
(3) To get a grade A, one is advised to spend **at least 1-3 hours** for each lecture hour in reviewing the lecture notes, doing the examples in the lecture notes and in the book, and doing **almost all** the homework problems.

I would suggest you to write down your objective grade for this course, and commit your effort to this milestone of your life goal. Again, I wish you succeed.
My objective grade for this course is _____. I will commit_____hours for each lecture hour to study the course materials.

APPEALS: After final course grades have been submitted, you may appeal your final grade. As a first step, you would make a written appeal to the instructor of the course **together with a copy of your photo ID.**

CLASS ENVIRONMENT: This is an on-line course. It is **important** for students to keep up with the course schedule. Quizzes and exams are only offered in certain designated time-frames. Students are expected to accept responsibility for study on-line materials, to complete **on-line quizzes** and **examinations** as scheduled by the instructor. A missed quiz receive a zero. **Please DO NOT send emails requesting extension time for quizzes and/or exams. Such emails will not be replied.**

PLAGIARISM: Plagiarism or cheating of any kind will not be tolerated. You cannot copy (totally or partially) someone else's solution or allow someone else to copy your solution. You may not let somebody else do the quizzes or exams for you. You will receive an "F" in the course if you are caught.

DISCIPLINE AND ACADEMIC HONESTY. The policies of the Student Discipline Code apply. You are advised to familiarize yourself with these policies, which can be found in the current edition of the AUMANAC. Please, adhere to the standards of academic integrity stated in the AUM Catalog.

DISABILITY ACCOMMODATIONS: Students who need accommodations are asked to contact me by e-mail to discuss your accommodations. If you have not registered for accommodation services through the Center for Disability Services (CDS), but need accommodations, make an appointment with CDS, 147 Taylor Center, or call 334-244-3631 or e-mail CDS at cds@aum.edu.

COPYRIGHT NOTICE
Material presented in this course may be protected by copyright law.

Syllabus Contingency Plan statement: If normal class and/or lab activities are disrupted due to illness, emergency, or crisis situation (such as a COVID-19 outbreak), the syllabus and other course plans and assignments may be modified to allow completion of the course. If this occurs, an addendum to the syllabus and/or course assignments will replace the original materials. In case the instructor cannot attend due to unexpected matter: A back-up instructor will be arranged by the Department of Mathematics.

 Disclaimer: The right of interpreting this syllabus exclusively belongs to the instructor.

Weekly Schedule for Math 1020A--Finite Mathematics (online): <u>FALL 2022</u>
Email Online Office hours: (M/T/R/F: 4:00--5:00) for online classes
Note: This is only a guide as how the course should proceed. Changes might occur.
Please DO NOT send emails requesting extension time for quizzes and/or exams. Such emails will not be replied.

Section with an asterisk (*) is optional.

---

1 :08/15 **2.1**

2. 08/17**: 2.2**

 08/21: Last day to add classes

---

3. 08/22: **2.3**
 08/23: Last Day for 100% Refund;
4. 08/24: **6.1-6.2**
 8/28: Last Day to Apply for Fall Graduation

---

5. 08/29: **6.3**

6. 08/31: **6.5**

 09/05: Labor Day, No class.
 09/06: Holiday, No class
7. 09/07: **6.6**
 09/11: Last Day for 50% Refund

---

8. 09/12: **6.7**
9. 09/14: **6.8**

10: 09/19: **8.3**
11: 09/21: **10.1**

---

12. 09/26: **10.2**
13: 09/28: **10.3**

---

14. 10/03: **Self-review for midterm test**
15: 10/05: Midterm test in **BlackBoard** (9:00am--10:15pm, 10/05)
 Note the exam must be submitted before 10:15pm.

Midterm Grades due 10/09.

16: 10/10:   10.4
17: 10/12:   **10.5**

18: 10/17: 10.6
19: 10/19: **11.1**

20: 10/24:   11.2
21: 10/26:   **11.3**
Last day to drop/resign classes: Fri., 10/30

22. 10/31:   12.1
23. 11/02:   **12.2**

24: 11/07:   **12.3**
25: 11/09:   **12.4**
(Curtiss Course Evaluation starts today: 11/09--11/30, 2022)

26: 11/14: 12.5
27:11/16: 12.6

11/19-27: Thanksgiving Holidays, no class!

28: 11/28: self-review/catch-up
Last day of class: 11/28 **for Monday/Wednesday classes.**
Tues., 11/29 for Tuesday/Thursday classes.

- All Pearson MyLab assignments must be completed by 11:59PM Dec. 04, 2022, **Absolutely Hard Deadline.**
- Final week Dec. 01; Dec, 05--07, 2022.
- **Final Exam in BlackBoard**: Mon. Dec. 05, 2022, at 09:00--10:15pm. **Note the exam must be submitted before 10:15pm. Please DO NOT send emails requesting extension time for quizzes and/or exams. Please do not send emails asking for extra credits after the final exam. Such emails will not be replied.**
- GOOD LUCK ON THE FINAL AND HAVE A GREAT WINTER BREAK!!!

Last updated: 08/04/2022