

COURSE SYLLABUS

INSTRUCTOR: Dr. Mingquan Zhan

MEETING SCHEDULE: MTWRF 8:00-9:30 am (July 12 ~ August 13)

Zoom ID: [954 7851 0065](#), Password: M12345

OFFICE HOURS:

Monday, Tuesday, Thursday, 2:30-4:30 pm (Zoom ID: 919 2283 8067, Password: M12345)

EMAIL ADDRESS: Mingquan.Zhan@millersville.edu

Textbook: Most of the topics covered in the course appear in the book listed below:

Graph Theory with Applications, by J.A. Bondy and U.S.R. Murty

This textbook is out of print. You can download their personal copy from D2L.

Prerequisites: This course contains lots of proofs and algorithms, so you should have taken Math 310. You need to be familiar with the usual proof techniques, especially induction and contradiction, and you should be able to write a coherent logical argument.

Objectives: The objectives of this course are to acquaint students with graph theory and its application and to increase their mathematical maturity.

Course Contents: Paths and cycles, trees, connectivity, Euler tours and Hamilton cycles, matching, edge coloring, independent sets and cliques, vertex coloring etc.

Exams, and worksheets: There will be three exams, and a final exam. Each exam will only cover the materials covered after the previous exam. The final exam will be comprehensive. The exam dates are approximate. The exact date for each exam will be announced in advance.

Exam 1: July 21 (Wednesday)

Exam 2: July 30 (Friday)

Exam 3: August 10 (Tuesday)

Final: August 13 (Friday), 8:00-10:00 am

Homework will be assigned and collected. Students should complete them seriously. The tests will be heavily based on the homework assigned and theorems mentioned in class. The object of the worksheets is to give you the opportunity to work on problems similar to those demonstrated in the lecture. You will have the opportunity to work in small groups and to ask me for assistance. Discussion between students on worksheet assignments is encouraged, but worksheet submitted for grading should be written up separately. **If you hand in your worksheet after the due date, you will lose all credits.**

I will make maximum effort to return your work promptly. After each exam is returned, students are expected to look it over carefully. Any questions regarding the grading must be reported within one week.

Guideline for Online Test:

To get started, you need the following.

- Desktop computer, laptop computer, or iPad
- A working built-in or external webcam and microphone (which could be your computer or your smart phone).
- A quiet and clean space where there will be no interruptions.
- Set up the webcam so that it shows a wide view of you in your work area. Position your webcam far enough away to **capture your shoulders, hands with some room to spare, and your computer**. Please use the link to see how to set up the webcam. www.youtube.com/watch?v=BoeXRLfpYv4&ab_channel=KryterionIncorporated



- MU ID. You will be required to show MU ID via webcam.
- Calculator
- You are allowed 1-2 blank pieces of scratch paper. You will be required to show the paper to me.
- Join a Zoom session at the time of the exam. Turn on Zoom video by clicking the button labeled “start video.”

During test:

- You will be watched via webcam during the entire test for any suspicious activity. It is OK for you to see the screen and interact with it.
- You are not allowed to have your test paper to be readable on the video.
- You are not allowed to use outside materials or communicate with others.
- You are allowed one 3-minute restroom break during the test.
- You must stay logged in to ZOOM until you have submitted your answers through D2L. Notify me once you have submitted your answers.
- No books or notes are allowed. You may use a calculator provided it does not have symbolic manipulation capabilities.

This is a timed, closed-book exam. Complete the test on paper. At the end of the test, you have 1-2 minutes to take pictures of (or scan) your responses and upload them into D2L.

Before you begin, ensure that your workspace is free of any notes or books and that your camera is set up to give a good view of you and your workspace without displaying your answers as you write them.

During the test you may ask questions via Zoom private chat.

Make-up policy: To make up an exam:

- You must notify your absence by noon of the exam date: e-mail (preferred) or call me.
- You must provide a reasonable evidence for your absence within two days from the exam date. The make-up should be made up within two days of their scheduled date. Problems would be more difficult if you could not provide a valid excuse or could not take the makeup within two days of their scheduled date. In addition, there is no makeup for exams after the final.
- Under no circumstances will you be given a makeup for the final.

Grading system: Three forms of assessment will be used to measure your understanding of Calculus I. The distribution of these assessments is:

	Number	Weight
1. Homework	---	18%
2. Exams	3	20% each
3. Comprehensive Final	1	22%

The following scale for letter grades will be used:

Range	Grade	Range	Grade
92~100%	A	72~77.9%	C
90~91.9%	A-	70~71.9%	C-
88~89.9%	B+	68~69.9%	D+
82~87.9%	B	62~67.9%	D
80~81.9%	B-	60~61.9%	D-
78~79.9%	C+	<59.9%	F

Academic Honesty: You are encouraged to discuss homework assignments with other students and with me if you do not understand how to start to solve a problem. However, when you submit material to be graded, it should be your work and not work you copied from some other source. Cheating on tests will not be tolerated. Turn off and stow all cell phones, pagers, and electronic listening devices during the exam. Calculators may be used, but NOT the calculator app on your cell phone. Cell phones in use during the exam will be consider cheating. If suspicious behavior is seen during an exam your paper will be taken and you will be asked to leave. The University's policies regarding academic honesty can be found at <http://www.millersville.edu/english/for-faculty/academic-integrity/index.php>.

Title IX Statement: Millersville University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment, comply with Title IX of the Education Amendments of 1972, 20 U.S.C. §1681, et seq., and act in accordance with guidance from the Office for Civil Rights, the University requires faculty members to report to the University's Title IX Coordinator incidents of sexual violence shared by students. The only exceptions to the faculty member's reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. Faculty members are obligated to report to the person designated in the University Protection of Minors policy incidents of sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred.

Information regarding the reporting of sexual violence, and the resources that are available to victims of sexual violence, is available at <http://www.millersville.edu/socialq/title-ix-sexual-misconduct/index.php>.

Disabled Students: If you are a person with learning or physical disability and anticipate needing any type of accommodation in order to participate in this class, please contact the Learning Services office, 352 Lyle Hall, 871-5554.

Final Word: Homework is an essential learning device in most disciplines. Students are expected to spend an additional minimum of two hours outside of class on homework for every hour spent in class. Think of playing a musical instrument well or being a well-trained athlete without practice. Wouldn't that be great? Well, it rarely happens! Preparation for the exams and final exam will require even more additional hours of study.

Be prepared to do your homework regularly, and to ask questions about it in class. If you need help outside class, please see me. I look forward to helping you!