

MAD 3301 - U01 – Graph Theory - Spring '22 TuTh 9:30am-10:45am GL 166

Instructor: Tedi Draghici **Website:** <http://faculty.fiu.edu/~draghici>

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Office Hours (via zoom): Mondays, Wednesdays 12-1:45pm; other times by **appointment**.

Zoom Office Hours Room: 910 8196 8747 Password: **w4c2Cd**

Direct link <https://fiu.zoom.us/j/91081968747?pwd=aGIVYWQxMkdIQkYvTlk4d215K0kxdz09>

Prerequisite: Discrete Math (MAD 2104) & COP 2210 (or its equiv.) – C grade or better. A student needs a good working knowledge of PROOFS in order to succeed in this course.

Textbook: Graph Theory by Ronald Gould, Dover, (2012).

This book is also available online at: <http://www.mathcs.emory.edu/~rg/> or via my homepage.

Topics: Below are the relevant sections for the course.

1. Fundamental Concepts: Ch. 1 - Sec. 1, 2, 3, 4, 5, 6
2. Connectedness & Distance: Ch. 2 - Sec. 1, 2, 3, 4
3. Trees and their uses: Ch. 3 - Sec. 1, 2, 3, 6
4. Networks and Flows: Ch. 4 - Sec. 1, 2
5. Edge and Vertex traversals: Ch. 5 - Sec. 1, 2, 3, 6
6. Planar Graphs: Ch. 6 - Sec. 1, 2, 3
7. Graph Colorings: Ch. 8 - Sec. 1, 2, 5, 6
8. Matchings in Graphs: Ch. 7 - Sec. 1, 2

Method of Evaluation: Your grade in the course is based **solely** on your overall percentage. The following items have the corresponding weight in your grade:

1. MiniQuizzes, worksheets, class participation - 12%;
2. Written Group Assignments - 12%;
3. Two 75 minutes midterm exams - 24% each
Tentative schedule: Exam 1 – Thursday, February 24;
Exam 2 – Thursday, April 07;
4. FINAL EXAM (28%) - comprehensive exam – Exact date TBA.

If beneficial to your grade, the lowest midterm will be replaced by the average of the final exam score and the score on that midterm.

The instructor reserves the right to make changes to this syllabus. These eventual changes will be announced in class and/or via email and you are responsible to be aware of them.

Important: All exams are based on class lectures, quizzes, worksheets, and assigned problems.
Grade-scale: Your overall grade is based solely on your overall percentage. The following percentage guarantees the associated grade (but small variations from this scale are possible, to your advantage):

Letter	Range%	Letter	Range%	Letter	Range%
A	90 or above	B	80 – 84.9	C	65 – 72.9
A-	88 – 89.9	B-	78 – 79.9	D	55 – 64.9
B+	85 – 87.9	C+	73 – 77.9	F	Less than 55

Drop deadlines -- Last day to Add/Drop with tuition refund: Tue. Jan.18;
-- Last day to drop with a DR grade (but no refund): Monday, March 21.

Holidays: Monday, Jan. 17 (MLK Day); Spring Break: Feb. 28-Mar. 5.

Make up policy: There are NO make ups for missed exams, quizzes or worksheets. **However,** I will discard a couple of lowest scores on quizzes and worksheets. **Excused (documented)** absences on quizzes or worksheets, could also be replaced by the averages of the others. **One missed exam due to an excused absence can be replaced by the final.** The final exam is mandatory. An absence related to the P3 app, accompanied by a letter from the FIU Covid Response Team (CRT) is certainly considered an excused absence. More on Covid policies below. Be aware that excessive absences, even excused ones, may lead to failure of the course or an incomplete grade. To be considered for an incomplete grade, the student must have completed at least three fourths (3/4) of the course and must be passing the grade of C or better.

Tutoring services: You can get help in Mathematics from the **FIU Centre for Academic Success**, GL 120. You can make appointments by calling 305- 348-2441 (MMC). For more information check out the link below

<https://learningcenter.fiu.edu/how-does-tutoring-work/>

Other Rules: Any beepers/cell phones, etc must be turned off during class. If you cannot arrive and leave on time, see me and explain. If you find a grading error, write a note to me at the top of your paper and return it promptly. I will try to identify any cheating that may occur in the course. To avoid unfounded suspicion, please show all your work, turn in any scratch paper you use in exams, and avoid sitting next to your study partners during exams.

The usage of an electronic device of any kind during exams is strictly forbidden.

ACADEMIC MISCONDUCT includes (but is not limited to) giving or receiving assistance on a test, quiz, or homework assignment for which such assistance is not permitted, falsifying a document to obtain an excusal from a test, and using unauthorized notes on a test or quiz. Penalties for Academic Misconduct range from an F in the course to expulsion from the university. A more complete definition of Academic Misconduct here <http://integrity.fiu.edu/misconducts.html>

Important Covid related policies and recommendations:

As cases due to the Omicron variant continue to increase in our community, we must unite and take necessary steps to prevent further spread.

- Daily and before arriving to campus, complete the P3 app. If you are not given the green check mark to enter campus, then return home, and contact me by email.
- Please check your FIU email account and the class website at least once a day. Email and Canvas are the best ways for the university, and your professors, to contact you.
- If you do not feel well, have tested positive for COVID, or have been in contact with a person with COVID while not yet being fully vaccinated, please do not come to class, immediately complete the P3 app to notify the COVID Response Team or call them at 305-348-1919, and contact me by email as soon as you can. To excuse absences for P3 failure/COVID, please contact the COVID Response Team at 305-348-1919. If you are directed to quarantine because of COVID-19, your absences will be considered excused. The make-up policies were outlined above.
- A vaccinated, asymptomatic individual exposed to a COVID positive person does not need to quarantine. They need to continue to wear a mask. It is recommended to test 3-5 days post known exposure. However, if at any time they become symptomatic, they need to test immediately. If the test returns positive, they need to follow the COVID positive protocol at that time.
- Please take every precaution to keep yourself and others healthy. Per CDC guidelines, **you are encouraged to get vaccinated and strongly advised to wear a mask indoors and in public including all FIU facilities.**
- **For me to assist you in achieving your goals, it is important for you to contact me as soon as you experience any events that might disrupt your course participation.** For up-to-date information about COVID, please see the repopulation.fiu.edu FAQs.