Welcome to MAD5205 Graph Theory I, Fall 2017

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Lecture: TuTh 1:30pm—2:50pm in MSB 406
Credit Hours: 3
Office Hours: TuTh 12:30pm—1:30pm, W 2:30-3:30pm or by appointment

Prerequisite: MAD4301 or approval by the instructor. This course is proof-based. You should be good at reading, writing, understanding, and most importantly, constructing proofs.


Textbook you may wish to consult:

Diestel, Graph Theory, 4th edition. There is a free, searchable, and hyperlinked electronic edition, which may be downloaded for offline use.
Bondy & Murty, Graph Theory with Applications (free downloadable at http://www.ccp6.jussieu.fr/pageperso/bondy/books/gtwa/gtwa.html)
Bollobas, Modern Graph Theory
Even, Graph Algorithms

Course Objective: The objective is to provide rigorous treatment of fundamental topics in Graph Theory. You will be required to write rigorous mathematical proofs of non-trivial results. An assignment will be due approximately every two weeks. Thus, in addition to learning Graph Theory, you will get to practice and improve your proof-writing skills.

Course Description: Fundamentals, Matching, Connectivity, Planar Graphs, Network Flow, Coloring, Ramsey Theory, and Eigenvalues of Graphs. Students are responsible for all material covered, as well as announcements made in lectures.

Midterms & Final Exam: There will be one midterm and one final exam. No make-up exams will be given.

Homework and Quiz: Homework is an important part of this course. You will learn the most by actively working exercises. After working the assigned exercises, you are encouraged to solve as many as you can the additional exercises in the book. Homework will be assigned in class and collected at the beginning of class on the assigned due date. HW will NOT be graded. Late homework will NOT be accepted. Bi-weekly quiz will be given on Thursdays when no tests are scheduled. No make-up quizzes will be given.

Grades: HW: 10%; Quizzes: 15%; Tests: 35%; Final Exam: 40%. This course will be graded on an ABCDF scale with plus and minus modifiers: A: 90%-100%, B: 80%-89%, C: 70%-79%, D: 60%-69%, F: <60%.

Re-grading policy: If you believe that a mistake in grading has been made you may request that your paper be regraded. Such request must be submitted in writing within one week from the day the graded test has been returned in class, and must be accompanied by the original (unaltered) paper. If you make any changes to the paper your request will be denied. Please note that if you request regrading, all problems are subject to review.
Academic Integrity Policy: UCF faculty members have a responsibility for your education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to infringements of academic integrity. Penalties can include a failing grade in an assignment, content area, or in the course, and a "Z Designation" on a student's official transcripts indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the

In addition, further disciplinary action through the university may be taken. Please be aware that disciplinary action through the university could result in suspension or expulsion. For more information on academic honesty, please see the Golden Rule contents available at http://www.goldenrule.sdes.ucf.edu. You are encouraged to study in groups, but any and all work submitted for grading, including homework, must be your own.

Religious Policy: It is the practice of the University of Central Florida to reasonably accommodate the religious observances, practices, and beliefs of individuals in regard to admissions, class attendance, and the scheduling of examinations and work assignments. A student who desires to observe a religious holy day of his or her religious faith must notify his/her instructor in writing at the beginning of the term (prior to the end of the add/drop period) to be excused from classes to observe the religious holy day. (Please note that documentation will be requested.)

Financial Aid Requirement: All faculty members are required to document students' academic activity and engagement at the beginning of each course. In order to document that you began this course, you need to go to Webcourses@UCF (www.webcourses.ucf.edu), and login with your NID and NID password to complete an activity titled "Assignment for Financial Aid". Failure to do so will result in a delay in the disbursement of your financial aid. The information relative to the activity will be sent to you via email.

Accessibility Accommodations: The University of Central Florida is committed to providing reasonable accommodations for all persons with disabilities. This syllabus is available in alternate formats upon request. Students who need accommodations must be registered with Student Accessibility Services, Ferrell Commons Room 185, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.

Important Dates: Labor Day (Monday September 4), Withdrawal deadline (Monday October 30), Veterans Day (Friday November 10), Thanksgiving (November 23-25).

Disclaimer Statement: This document is furnished for student information only. It is subject to change without previous announcement.