

**INTRODUCTION TO GRAPH THEORY (MATH 581)
FALL 2014**

TTH 11:00 - 12:15 NATURAL SCIENCES 212F

1. IMPORTANT INFORMATION

Instructor: Stephen J. Young

Office: Natural Sciences 114

Office Hours: Tuesday 2:30pm – 4:00 pm , Thursday 12:30 pm – 2:00 pm , or by appointment.

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Office Phone: (502) 852-3338

Course Webpage www.math.louisville.edu/~syoung/teaching/math581/fall14/

Textbook *Graph Theory* Bondy and Murty

2. LEARNING OUTCOMES

At the end of the semester you should be able to:

- ◆ Prove basic facts in graph theory, including, but not limited to topics related to matching, connectivity, planar graphs, coloring, flows, extremal graph theory, Ramsey theory, random graphs.
- ◆ Competently use L^AT_EX to present proofs pertaining to graph theory.

3. GRADING SYSTEM

All exams and quizzes will be graded out of four-points on the following holistic five-point scale:

- 5** (~ A+) Correct and exceptional work
- 4** (~ A) Correct and well explained work, potentially with minor errors.
- 3** (~ B) Good work with more serious errors or insufficiently clear explanation.
- 2** (~ C) Significant, but incomplete or incorrect, explanation that shows understanding.
- 1** (~ D) Some ideas that might lead to the correct answer are presented.
- 0** (~ F) No work, work that will not lead to a correct result, illegible, or unintelligible.

4. GRADING BREAKDOWN

Final grades in this course will be determined according following, with the proviso that in order to pass the class you must pass (C- or better) the final assessment. At the judgement of the instructor and on an individual basis, course grades may be higher than the numerical calculation would yield.

Homework (20%): Homework will be assigned and intermittently collected/graded according to the learning needs of the class. If a particular homework assignment is not collected/graded all students will receive full credit for that assignment.

Exams (25%) × 2: There will be two exams during the course of the semester, tentatively scheduled for October 2 and December 4.

Final Exam (30%): The final exam will be on Tuesday, December 9, 11:30 am – 2:00 pm.

GRADE DISTRIBUTION

A+	A	A-	B+	B	B-	C+	C	C-	D	F
95	85	80	75	65	60	55	45	40	30	0

5. AMERICAN DISABILITIES ACT

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact the Disability Resource Center (852-6938).

6. COURSE POLICIES

- ◆ Unless otherwise specified in writing, all tests are closed book and closed notes. In order to receive credit all work must be shown and complete sentences must be used where appropriate.
- ◆ Homework problems should be written in L^AT_EX and printed out and turned in. If necessary it is occasionally acceptable to email a pdf of your solutions.
- ◆ Although you may discuss work among yourselves, you must write your solutions up in your own words by yourself. It is necessary to include each problem the names of those you discussed the problem with in a substantive way.
- ◆ Please silence all cell phones and noise making devices during class. Note that some models of cell phone when put on vibrate make a significant amount of noise.
- ◆ If you believe an exam has been graded incorrectly do not mark it in any way. Submit to me, in writing, along with exam, a short statement of why you think a *particular* problem, or set of problems was graded incorrectly. Regrade requests will not be accepted later than the end of the class period after they are returned. I reserve the right to photocopy any or all of your exams in order to prevent regrade abuse.
- ◆ In order to receive full credit on exams, homework, etc. you must show all work in a clear and coherent manner. In particular, correct answers not fully supported by explanations using complete sentences, where appropriate, will not receive full credit. It is your responsibility to present your solutions in an easily understood manner.
- ◆ If you need help outside of normal office hours, please feel free to stop by my office. I may not be able to help at that moment, but we will at least be able to arrange another time to meet.
- ◆ Please keep all your exams and homework; if you believe there has been an error in the recording of your grades they are the only way to validate your claim. Also, grades will be placed on Blackboard, so please periodically check the grades posted there so we can resolve any issues quickly.
- ◆ Make up exams will be only be guaranteed to be given as required by university policy (i.e, a conflicting university sanctioned events), all other situations, such as medical procedures or emergencies, will be considered on a case by case basis. Make up exams may be required to be administered by University Testing Services, which charges a fee. There will be no make up quizzes.
- ◆ Academic dishonesty is prohibited at the University of Louisville. It is a serious offense because it diminishes the quality of scholarship, makes accurate evaluation of student progress impossible, and defrauds those in society who must ultimately depend upon the knowledge and integrity of the institution and its students and faculty. Any instances of academic dishonesty in this course will be taken extremely seriously.
- ◆ All content in this syllabus is subject to change in order to accommodate unforeseen circumstances and achieve the learning outcomes. Any changes in the syllabus will be announced in class.