

**MATH 4483 – Graph Theory**  
**Section 01, Spring 2008**

Wednesday 5:30 pm – 8:00 pm 303 Boyd Bldg

**Prerequisites:** Math 3003.

**Instructor:** Dr. Rui Xu

**Office:** 311 Boyd Bldg

**Phone:** (678)839-4122

**E-mail:** xu@westga.edu

**Website:** <http://www.westga.edu/~xu/>

**Office hours:** MRF: 10:50 am – 1:00 pm; Wednesday 2:00 pm – 5:30 pm or by appointment.

**Textbook:** Introductory to Graph Theory, by Gary Chartrand & Ping Zhang, McGraw-Hill Companies. 2005.

**Course Description:** An introduction to combinatorics. Topics include Degrees, Isomorphisms, Trees, Connectivity, Eulerian graphs, Hamiltonian graphs, Matchings and factorizations, Planarity and graph colorings.

**Objectives:**

- (I) A thorough understanding of the degree of graphs.
- (II) An understanding of isomorphic graphs.
- (III) An understanding of trees.
- (IV) A thorough understanding of connectivity of graphs.
- (V) A thorough introduction to Eulerian graphs and Hamiltonian graphs.
- (VI) An introduction to Matchings.
- (VII) A thorough understanding of Planarity and graph colorings.

**Grading Methods:** Grades will be assessed based on a total of 570 points, using the standard decade scale: (90–100%=A, 80–89%=B, 70–79%=C, 60–69%=D, below 60%=F).

|  |        |
|--|--------|
| Test 1 (January 30)                          | 100pts |
| Test 2 (February 27)                         | 100pts |
| Test 3 (April 2)                             | 100pts |
| Test 4 (April 30)                            | 100pts |
| Final (May 7, Wednesday, 5:30 pm – 7:30 pm ) | 150pts |
| Homework                                     | 100pts |
| Attendance                                   | 20pts  |

**Homework & Test policy:** Homework is due every two weeks. Late homework is not accepted. Homework may be graded partially or totally. I may grade a specific problem or just look for completeness. I am interested in the solution of problems not just their answers. So you need to show your work in details to get credits. The lowest test will be dropped, no make-up test.

**Other Policies:**

1. Class attendance will be taken every class day. You are not allowed to come to class late or to leave early. If you miss class for any reason, it is your responsibility to get the lecture notes from a classmate, read the text, and do the homework. You are allowed to miss at most 3 classes to get the full 20pts for attendance.
2. Pagers or cell phones should be set to an inaudible setting.
3. If you are a person with any kind of disability and anticipate needing any type of accommodation to participate in this class, please let me know and make appropriate arrangements with Disability Services.

**Important Dates:**

- |                      |   |
|----------------------|---|
| January 9-January 15 | : Drop/Add and late registration                          |
| January 21           | : Martin Luther King Holiday (offices closed, no classes) |
| March 3              | : Last day to withdraw with a grade of W                  |
| March 15-March 22    | : Spring recess (no classes)                              |
| April 2              | : Honors Convocation (classes canceled 1:00 4:00 p.m.)    |
| April 30             | : Last day of class                                       |
| May 1                | : Reading Day   |