

**MAA 5210.01 Topics in Advanced Calculus (4 Credits)**  
**(Fall 2007)**

**Instructor:** Dr. Jiongmin Yong

**Office:** MAP 231A    **Phone:** (407)-823-2089    **E-mail:** jyong@mail.ucf.edu

**Office Hours:** Tuesday and Thursday 2:00 — 4:00pm, Wednesday 3:30 — 4:30pm

**Classroom:** MAP 204    **Class Times:** Tuesday and Thursday 5:30— 7:20pm

**Prerequisites:** MAA 4226 or equivalent (Needed: Calculus I, II, III; Linear Algebra)

**Textbook:** Advanced Calculus, 3rd edition, by Angus E. Taylor and W. Robert Mann

**Contents of the Course:** Material will be essentially taken from the textbook. But it will not exactly follow the order in the book. Main topics covered will be the following:

- Limit theory for sequences (related to Chapters 1, 2, 5, 10, 11, 16, 21)
- Functions (related to Chapters 1, 3, 5, 10, 11, 17, 20)
- Differentiation (related to Chapters 1, 4, 6, 7, 8, 9, 10, 12, 14, 20)
- Integration (related to Chapters 1, 13, 14, 15, 18, 20)
- Infinite series (related to Chapters 19, 20, 21)

**Attendance and Classroom Conduct:** Attendance will be checked. You will earn 3% extra credit on your course score average if you have no more than 3 unexcused absences. Excuse absences, must be approved no later than 7 days after the absence. Common courtesy requires that students arrive in class on time, and stay the entire class period. Turn your cell phones and pagers off. Please treat your classmates and the instructor with respect and courtesy.

**Notes-Taken:** Taking notes is a good way of study, especially for a graduate student. On the other hand, the instructor will not exactly follow the textbook, and will add some important material beyond the textbook. Hence, every student in the class is strongly encouraged to take notes.

**Homework:** Homework is assigned weekly and will be collected once a week. Students are required to do all the assigned homework problems. Randomly selected problems will be graded each time (10 points total). Selected difficult problems will be presented in the class upon request. Volunteer presentation of difficult problems in the class might get extra credits.

**Tests and Exam:** There will be ONE midterm exam (100 points) and ONE final exam (100 points). **No makeups!** The final exam is mandatory for all students. No exceptions are permitted for early travel, etc.

**Grading Policy:** Two lowest homework scores will be dropped. Homework scores count 30%, midterm exam score counts 30%, and the final exam score counts 40%. The course grade will be scaled as follows:

A+: 98—100%    A: 93—97%    A-: 90—92%    B+: 88—89%    B: 83—87%    B-: 80—82%  
C+: 78—79%    C: 73—77%    C-: 70—72%    D+: 68—69%    D: 63—67%    D-: 60—62%  
F:    0—59%

**Academic Honesty:** Cheating will not be tolerated. Students found to be cheating will be dealt with to the full extent of the University policy.