

Math 631, Spring of 2008  
Real Analysis

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**The URL for the WIKI:**

*[http://www.otal.umd.edu/wiki/real\\_analysis\\_book](http://www.otal.umd.edu/wiki/real_analysis_book)*

**Texts for the Course**

I am currently preparing a fourth edition of Royden's Real Analysis which will become Royden and Fitzpatrick's Real Analysis. I will provide students with copies of Chapters 17 to 22. In addition, I have placed on reserve in the Engineering Library a copy of my Advanced Calculus book which contains background material.

**Office Hours**

Office hours will take place after each class, between 9.00 until 10.00. Office hours can also be arranged by appointment.

**Grades and Exams**

There will be a Midterm Exam and a Final Exam. Each of these will be worth 30 points. The homework will count 40 points. The midterm will take place after we have completed Chapter 18 and will be announced the week preceding the exam. The Final Exam will take place in our regular classroom (Room 1108, Math Building) between 10.30 a.m. and 12.30 a.m., on Thursday, May 15th.

**Homework**

A homework assignment will be due each Monday and returned on the following Friday. Only a portion, but at least half, of the assigned problems will be graded.

The lowest homework grade will be dropped since late homework will not be accepted.

## Homework Assignments

**Homework Assignments will be posted at least one week ahead of their due date at**

*[www.math.umd.edu/~ pmf/631SyllabusandHomework.pdf](http://www.math.umd.edu/~pmf/631SyllabusandHomework.pdf)*

**Homework due on Monday, February 4:**

Problems 6, 7, 12 and 13 in Chapter 17.

**Homework due on Monday, February 11:**

Problems 26, 30 and 32 in Chapter 18.

**Homework due on Monday, February 16:**

Problems 25, 33, 34, 35, and 36 in Chapter 18.

**Homework due on Wednesday, February 27:**

Problems 42, 43 [parts (i) and (iii) of 43], 44, and 46 [omit the final question in 46] in Chapter 18.

**Homework due on Monday, March 3:**

Problems 45 (assume parts (i) and (ii) and do parts (iii) and (iv)), 50, 53 and 54 in Chapter 18

**Double Homework due on Wednesday, April 2: Problems numbered according to the March 29th hand-out**

Problems 73, 74, 76, 81, 83, 85, 87, 88 and 89 in Chapter 19.

**Homework due on Monday, Monday, April 7 :**

Problems 90-97 in Chapter 19.

**Homework due on Wednesday, April 15 :**

Problems 105, 106, 113, 116, 117, 118 and 119 in Chapter 19.

**Homework due on Friday, April 25 :**

Problems 37, 39, 42, 46, 47, 49 and 52: These numbers are those used in the new hand-out on Lebesgue Integration on Euclidean Space.

**Homework due on Wednesday, April 30:**

Problems 22, 23, 25, 26, 29 and 38 of Chapter 20