

Fall 2016 **Math 4820\5820** MW 5:00-6:15 PM
UH 3780 Introduction to Real Analysis I Telephone 419-530-2207
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Office Hours: MT 1:00 MW 4:00-4:50 and by appointment.

TEXT: Principles of Mathematical Analysis, by Walter Rudin, McGraw Hill, 3rd edition, 1976.

PREREQUISITE: Math 3190 or the equivalent.

SYLLABUS: Chapters 1 to 6.

REFERENCES: Elements of Real Analysis by Robert G Bartle, Wiley and sons, 2nd edition, 1976; Introduction to Real Analysis by R Bartle and D Sherbert, Wiley and Sons, 4th edition, 2010; Methods of Real Analysis by R. Goldberg, Wiley and Sons, 2nd edition 1976; Real Analysis I, by V Zorich, Springer, 2004

Course Description: A rigorous treatment of calculus of one and several variables. Topics: the real number system; sequences and series; elementary metric space theory (compactness, connectedness and completeness); the Riemann integral.

GRADES:

Written Assignments	55% or 70%
Midterm and Final	45% or 30%

The written assignments will be worth either 55% or 70% and the midterm test and the final will make up the remainder 30% or 45% of the grade. (The final counts twice as much as the midterm.) Assignments must be done independently. Assuming that independence, the variability of the weightings will be chosen to maximize your grade. The grading scale is: A- is 90%; B- is 80%; C- is 70% and D- is 55%.

SCHEDULE:

Midterm Test	Wednesday, October 19
Final Exam	Wednesday, Dec. 14, 5:00-7:00 PM in UH 3780

Late assignments will lose 4% for the first day and 2% per day thereafter. Worried students should contact the instructor *before* the exam. The last day to withdraw is October 28, 2016.

Escort Service: 530-4292