Course Information Sheet
Mathematics 825/826, Fall 2016/Spring 2017, OldH 304
1:30p.m.- 2:20p.m., M-W-F.

Text: Walter Rudin, *Principles of Mathematical Analysis,* McGraw-Hill, Third Edition, 1976.

Course Description: Most of the topics in this one year-course lie in chapters 1–7. At the end of the year, and as time will allow, some special topics from chapters 8-9 will be covered. Topics of this course include: the real and complex number systems, basic topology of metric spaces, sequences and series of real numbers, continuous functions, differentiation, Riemann-Stieltjes integrals, sequences and series of functions.

Homework: I will assign problems (in sets) from and outside the text. Please make sure your solutions are neatly and clearly written on clean paper that has not been torn out of a spiral notebook. Also, write only on **one side of the page**. It is very important that you attempt and think about the assignment before you start seeking help. It is perfectly acceptable to work and exchange ideas with others; but after the fact you spent sufficient time thinking about the problems. If you receive help or a key idea from someone else for solving a problem, it is important to cite the source of the help. Please make sure your homework is turned in on time.

Exams: There will be one midterm exam and a final exam. The dates and times for the midterm and the final exam will be announced in advance. I shall try having the midterm exam in the late afternoon 4-6 p.m. in a reserved room.

Grading Policy: The following table shows how points will be awarded over the course:

	Number	Pts.	Total
Midterm Exams	1	100	100
Homework Sets	8	?	200
Final Exam	1	200	200
TOTAL			500

IMPORTANT BONUS: If your score (percentage-wise) on the final exam is greater than the score on the midterm exam, then the low score of the midterm will be replaced by that of the final exam score.

References: In addition to the books listed below, you can look at many books in the library titled by: *real analysis, mathematical analysis, etc.*...

(1) Kenneth R. Davidson and Allan P. Donsig, *Real Analysis with Real Applications*, Springer-Verlag, New York, 2010.
(2) Tom M. Apostol, *Mathematical Analysis*, Addison-Wesley, Second Edition, 1964.
(3) Maxwell Rosenlicht, *Introduction to Analysis*, Dover Books, Kindle edition, 2012.
(4) Kenneth A. Ross, *Elementary Analysis: The Theory of Calculus*, Springer; 2nd ed. 2013.