

**MATH 110A SYLLABUS
AUTUMN 2018**

Lectures	TH 11:00-12:20, HSS 1128A
Instructor	James McKernan, APM 6260, phone (858)-534-6347
Office Hours	T 9:00-11:00AM
	or by appointment, if you cannot make these times.
Teaching Assistant	Xuefeng Shen, xus009@ucsd.edu
Sections	M 5:00-5:50PM, APM B412
Office Hours	TH 5:00-6:00PM, APM 5712
Text	<i>Partial Differential Equations</i> , W.A. Strauss (2nd edition)
	See web site for some other suggestions.
Exams, Final	Wednesday December 12th, 11:30-2:30pm, TBA.
Midterms	Thursday October 18th, Thursday November 8th.
Grading	Homework 30%, Midterms 30%, Final 40%.
Syllabus	Fourier series, orthogonal expansions, and eigenvalue problems. Sturm-Liouville theory. Separation of variables for partial differential equations of mathematical physics, including topics on Bessel functions and Legendre polynomials.
Prerequisites	Math 20D and either Math 18 or Math 20F or Math 31AH, or consent of instructor.
Homework	Homework will be assigned on the website every Monday.

It will be due one week later every Tuesday at 7pm, in a dropbox in the basement of APM. Late problem sets are **not accepted**, however the lowest problem set score will be dropped.

At the top of every of each assignment should appear

- (1) Your name.
- (2) Either the text “Sources consulted: none” or a list of all sources consulted other than the main textbook, supplementary notes, and your own notes from lecture and section. This is *required*. (Examples of things that should be listed if used: office hours, names of study group partners, Wikipedia, etc.)

You should not expect to be able to solve every single problem on your own; instead you are encouraged to discuss questions with each other or to come to office hours. If you meet with a study group, you may find it helpful to do as many problems as you can on your own beforehand. But write-ups must be done independently. (In practice, this means that it is OK for other people to explain their solutions to you, but you must not be looking at other peoples solutions as you

write your own.) Use examples in the book as a model for the level of detail expected. Write in complete sentences whenever reasonable. If you have questions about the homework, it is best to ask these in office hours.