Mathematics 22a: Honors Linear Algebra and Calculus for Mathematical Physics I

Time and location: Science Center 102b, MWF, 11-12.
Instructor: Prof. Stavros Garoufalidis, Science Center 322; 5-9560
`stavros@math.harvard.edu`
Office hours: Monday, 1-3.
Teaching fellows: Valentin Dinu, 492–1581, `dinu@fas.harvard.edu`
Alex Saltman, 493-6219, `saltman@fas.harvard.edu`
Sections: Held on a weekly basis. Times and places to be arranged.
Prerequisites: If you did not receive a score of 4 or 5 on the BC Calculus AP exam, then you must make an appointment to meet with me before enrolling in this course.
Text:

- Bamberg and Sternberg, *A Course in Mathematics for Students of Physics, 1.* Available at the Coop.

Course description: Vectors and matrices; eigenvalues and eigenvectors; systems of linear differential equations; differentiation and integration of functions of several variables; differential 1-forms. *Mathematical proofs.*
Grading policy:

- *Homework* will be assigned daily and collected at the beginning of every Monday class. Of all the assignements, your weakest two (including the empty) will not count for your grade. Late homework will not be accepted and is considered as empty. The homework counts for 20% of the final grade. Working with others on your homework assignments is strongly encouraged, however you should write up your results separately.
- There will be two in-class *midterm exams*, the first held on Friday, October 16 and the second on Friday, November 20. Each will count toward 20% of the final grade.
- The *final exam* will be held on Wednesday, January 23, Saturday, at 11 o'clock. Your score accounts for the last 40% of your final grade.

Calendar:

	M	W	F	Chapters		
Sep		16	18		1	1
	21	23	25	1	1	1
Oct	28	30	2	1	2	2
	5	7	9	2	2	2
	12	14	16	Columbus Day	3	3
	19	21	23	3	3	First Midterm
	26	28	30	3	4	4
Nov	2	4	6	4	4	4
	9	11	13	4	Veterans' Day	4
	16	18	20	5	5	Second Midterm
	23	25	27	5	5	Thanksgiving
Dec	30	2	4	5	5	6
	7	9	11	6	6	6
	14	16		6	6	
Jan	4	–	15	Reading period		