

PHYS 301

HOMEWORK #11

This is an optional homework set. Not submitting this homework will have no effect on your homework grade (or your final course grade). If you do wish to submit this homework for a grade, you must turn it in by 5 pm on Monday, 29 April. For this homework, you may turn in either a hard copy or electronic copy. If you submit an electronic copy, you must send it from your Loyola email account and must submit a single file. The best files to send are either .nb files or .pdfs. Do not scan each page and submit a series of jpgs, I will not grade those. If you scan your pages, turn them into a single .pdf and send that to me, or just turn in the hard copies of the pages. The homework grade you receive will replace your lowest (non - zero) grade of the term.

Show complete solutions. You may use Mathematica to compute Fourier and Legendre integrals; if you do, include that output with your homework.

All questions from Boas, Chapter 13 :

1. Problem 3, p. 626.
2. Problem 7, p. 627
3. Problem 12, p. 627
4. Problem 2, p. 632
5. Problem 5, p. 632
6. Problem 7, p. 633
7. Problem 2, p. 637
8. Problem 6, p. 638
9. Problem 1, p. 650.

Problem 7, p. 650