NOTES FOR THE FINAL EXAM

The Final Exam will be held in the usual classroom, LSB 315, on Saturday May 2, from 1:00-3:00. It will be a closed note, closed book exam. Calculators will be not be needed or allowed. I will provide a list of useful equations, identities and formulae that you will need. I will provide you with a table of integrals that should cover any (but the most trivial) integrals you will need for the exam; I will provide results for the indefinite integral, you will have to evaluate the integrals at appropriate limits if the definite integral is needed. (I expect you can integrate polynomials without assistance.)

The exam will cover all material we have studied this semester, both in Griffiths and in Boas, and including the classnotes which I have posted on the course website.

The material that was not included on the second hour exam (generating function, expanding functions in Legendre polynomials, partial differential equations) will be overrepresented on the final exam compared to class time spent on the material. This material occupied approximately 10% of class time, and I estimate (roughly) that 20% of the final exam will deal with this material. (This overrepresentation results from the simple fact that this material has never been on an exam this term.)

As on the first two hour exams, I will ask you Mathematica based questions. These could involve debugging statements or short programs, or writing short statements or programs. Any Mathematica functions or features we have used this term are possible candidates for the final exam, and I anticipate that Mathematica questions will represent 10-15% of the final exam.

The remainder of the final exam will be divided roughly equally between the material covered on the two hour exams (vector calculus/orthogonal coordinate systems on the first exam; Fourier series/differential equations/Legendre polynomials on the second hour exam). Those portions of orthogonal coordinates that we did not cover on the first exam are possible questions for the final exam, and will be considered as part of the first hour exam material.

Office hours:

My office hours this week are:

W: 9-11 am
Th: 9-11 am
F: 9-11 am and 1-3 pm
(I am sorry that my schedule is booked for M and T of this week).