Topics in Final Exam (May 6, 12-1:50PM, Meyer 122)

Vector Calculus

- Background is in chapters 2 and 3, or lecture notes 6, 7, 8
- Emphasis will be on Stokes and Gauss theorems, conservative fields, in cartesian, cylindrical or spherical coordinates.

ODE’s

- Background is in chapter 10 (sections 10.1 to 10.4), or lecture notes 13-17
- Emphasis will be on 2nd-order ODE’s (integrating factor), Frobenius, Exact Equations, Separation of Variables.

PDE’s

- Background is in chapter 11 (except sections 11.2, 11.3.3 and 11.4.3-5), or lecture notes 18-20
- Solutions in Cartesian, Cylindrical and Spherical geometries. Emphasis will be on selecting which solution corresponds to boundary conditions, and getting coefficients for series solution.