Physics 360 Student Survey

About you 1. Your name (last, first, middle): _ 2. Preferred Nickname: _____ 3. Box # _____ Phone # (dorm or cell) _____ Class(Fr,So,Jr,Sr) _____ 4. Probable major ______ Academic adviser _____ 5. What year did you take Differential Equations, '11, '12, '13? Here or elsewhere? 6. What other math courses have you taken (I prefer names, not numbers)? 7. What kinds of applications are you particularly interested in? Theoretical physics? Mathematical biology? Mathematical economics? Computer simulations? 8. Is there anything the instructor should know about you? (Re: health, job schedule, athletics, extra courses, particular difficulties in learning or studying, etc.) 9. Have you purchased a textbook for this course?

(turn over)

Please indicate your sense of competence with the following (NOTE - I'm not assuming many of you to have a background in much of this material; I'd just like to be informed if several of you happen to.)

38. Runge-Kutta

(Circles correspond to: Great, O.K., SoSo, Weak, Poor/None)	
Calculus	
10. Integration by parts	$\label{eq:conditional} \textbf{Great} \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc \textbf{Poor/None}$
11. Line integrals $\int \vec{\mathbf{F}} \cdot ds$	$\label{eq:Great} \ensuremath{\bigcirc}\bigcirc\bigcirc\bigcirc\bigcirc \ensuremath{\operatorname{Poor/None}}$
12. Surface integrals $\int \vec{\mathbf{F}} \cdot d \vec{\mathbf{A}}$	$\label{eq:conditional} \textbf{Great} \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc -\!\!\! \bigcirc \textbf{Poor/None}$
Computer	
13. Excel	Great O—O—O—O Poor/None
14. Sage	Great O—O—O—O Poor/None
15. Python	Great \bigcirc — \bigcirc — \bigcirc — \bigcirc Poor/None
16. Maple	Great \bigcirc — \bigcirc — \bigcirc — \bigcirc Poor/None
17. Matlab	Great \bigcirc — \bigcirc — \bigcirc — \bigcirc Poor/None
18. Any programming	$\label{eq:Great} \ensuremath{\bigcirc}\bigcirc\bigcirc\bigcirc\bigcirc \ensuremath{\operatorname{Poor}} / \ensuremath{\operatorname{None}}$
Matrices	
19. Invert	$\label{eq:Great} \ensuremath{\bigcirc}\bigcirc\bigcirc\bigcirc\bigcirc \ensuremath{\operatorname{Poor/None}}$
20. Diagonalize	$\label{eq:Great} \ensuremath{\bigcirc}\bigcirc\bigcirc\bigcirc\bigcirc \ensuremath{\operatorname{Poor/None}}$
21. Wronskian	Great O—O—O—O Poor/None
A	
Assorted Topics 22. Complex Numbers	$ Great \bigcirc\bigcirc\bigcirc\bigcirc Poor/None $
23. Linear Vector Spaces	Great O—O—O—O Poor/None
24. Change of basis	Great O—O—O—O Poor/None
25. Separation of Variables	Great ○—○—○—○ Poor/None
26. Linear ODE, constant coeffs	,
27. Series Solution (Frobenius)	Great
28. Laplace Transforms	
29. Fourier Analysis	Great O—O—O—O Poor/None
30. Fourier Transforms	Great O—O—O—O Poor/None
Vector Calculus 31. Grad	
32. Div	Great ○—○—○—○ Poor/None
33. Curl	Great ○—○—○—○ Poor/None
34. Gauss' Law	Great O—O—O—O Poor/None
35. Stokes' Theorem	Great ○—○—○—○ Poor/None
36. Green's Theorem	Great O—O—O—O Poor/None
Numerical Methods	
37. Euler	Great O—O—O—O Poor/None

Great $\bigcirc - \bigcirc - \bigcirc - \bigcirc - \bigcirc$ Poor/None