

Methods of Theoretical Physics (LB/PHY 415), Spring 2011
Lecture and Assignment Schedule

Readings are from Mathematical Methods in the Physical Sciences by M.L. Boas, 3rd Edition
 All course meetings are in Biochemistry 111.

| Day | Date | Reading Due | Lecture Topic | Discussion | Homework Due |
|------------|-------------|--------------------|---|-------------------|---------------------|
| Tues. | 1-11 | Chapter 5 | Pretest + Team Formation | | |
| Thurs. | 1-13 | | Series & Integration Series & Integration | | H1 |
| Tues. | 1-18 | Chapter 6 | Vector Analysis | | H2 |
| Thurs. | 1-20 | | Vector Analysis | | |
| Tues. | 1-25 | Chapter 7 | Fourier Series | D1 | H3 |
| Thurs. | 1-27 | | Fourier Series | | |
| Tues. | 2-1 | Chapter 8 | Ordinary Differential Eqns. | D2 | H4 |
| Thurs. | 2-3 | | Ordinary Differential Eqns. Project Proposal Due (by noon via e-mail) | | |
| Tues. | 2-8 | Chapter 3 | Matrices | D3 | H5 |
| Thurs. | 2-10 | | Matrices | | |
| Tues. | 2-15 | Chapter 10 | Curvilinear Coordinates | | |
| Thurs. | 2-17 | | TEST #1 | | |
| Tues. | 2-22 | | Curvilinear Coordinates | D4 | H6 |
| Thurs. | 2-24 | Ch. 12 & 13 | PDE's and Series Solutions | | |
| Tues. | 3-1 | | PDE's and Series Solutions | D5 | H7 |
| Thurs. | 3-3 | | Project Overview Due (in class) Individual Project Meetings with Instructors | | |
| Tues. | 3-8 | | [spring break] | | |
| Thurs. | 3-10 | | [spring break] | | |

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| Tues. 3-15 | | PDE's and Series Solutions | | |
| Thurs. 3-17 | | PDE's and Series Solutions | | |
| Tues. 3-22 | | PDE's and Series Solutions | D6 | H8 |
| Thurs. 3-24 | | PDE's and Series Solutions | | |
| Tues. 3-29 | | PDE's and Series Solutions | | |
| Thurs. 3-31 | | TEST #2 | | |
| Tues. 4-5 | | PDE's and Series Solutions | | |
| Tues. 4-7 | | PDE's and Series Solutions | | |
| | | Complex Variables | | |
| Tues. 4-12 | Chapter 14 | Complex Variables | D7 | H9 |
| Thurs. 4-14 | | Complex Variables | | |
| | | In-class Peer Review of Projects | | |
| Tues. 4-19 | | Complex Variables | D8 | H10 |
| Thurs. 4-21 | | Complex Variables | | |
| Mon. 4-25 | | Oral/Poster Presentations at LBC Research Symposium | | |
| Tues. 4-26 | | Workshop/Course Evaluation | D9 | H11 |
| Thurs. 4-28 | | Final Exam Review | | |
| Mon. 5-2 | | TEST #3 3:00 - 5:00pm | | |
| | | Post-test | | |