Course Outline  
Spring 2014

Course:  Physics 25

Course Title:  General Physics II


Time and Place:  MTWR, 2:00 - 2:50, Physics 104

Instructor:  Dr. Don H. Madison  
Physics 107  
Office Hours:  11-12, MTWR 
e-mail madison@mst.edu

Course Format:  Three lectures and one PLC (Physics Learning Center) session per chapter. Each student is encouraged to ask questions at any time during the lecture.

Course Web Site: http://physics.mst.edu/currentcourses/phys25/index.html

Student Responsibilities:  Read chapter in book prior to lecture, work assigned Problems prior to the PLC session

Grades:  The final grade for the course will be obtained from homework, quizzes, 3 one hour tests and a comprehensive final exam. The various components will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homework</td>
<td>10 points</td>
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<tr>
<td>Quizzes</td>
<td>25 points</td>
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<tr>
<td>Exams</td>
<td>65 points</td>
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<tr>
<td>Total</td>
<td>100 points</td>
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Quizzes:  There will be a one question 10 minute quiz at the next class meeting following each PLC session. The quiz questions will be similar to the worked examples in class or the assigned problems from the book. The lowest quiz score will be dropped.

Exams:  There will be 4 exams, three in class 1 hour exams and one 2 hour final. The lowest exam score will be dropped.

Grading Scale:  
A: 90%  
B: 80%  
C: 65%  
D: 50%

PLC location:  Physics 104, 202, and 207
January 21  Chapter 21 - Electric Charge and Coulomb's Law
22  Chapter 21 - Continued
23  Chapter 21 - Continued
27  Chapter 21 – PLC: Problems 2, 9, 11, 13, 25, 37
28  Chapter 22 - The Electric Field
29  Chapter 22 - Continued
30  Chapter 22- Continued

Feb. 3  Chapter 22 – PLC: Problems 3, 11, 13, 15, 24, 45
4  Chapter 23 - Gauss' Law
5  Chapter 23 - Continued
6  Chapter 23 - Continued
10  Chapter 23 – PLC: Problems 1, 9, 21, 41, 50, 51
11  Chapter 24 - Electric Potential
12  Chapter 24 - Continued
13  Chapter 24 - Continued
17  Chapter 24 – PLC: Problems 7, 17, 23, 35, 45, 67
18  Review and Discussion
19  Test #1
20  Chapter 26 - Current and Resistance
24  Chapter 26 - Continued
25  Chapter 26 - Continued
26  Chapter 26 – PLC: Problems 9, 16, 18, 39, 41, 75
27  Chapter 27 - Circuits (omit sections 8 & 9)

March 3  Chapter 27 - Continued
4  Chapter 27 - Continued
5  Chapter 27 – PLC: 5, 7, 19, 27, 32, 40
6  Chapter 28 - Magnetic Fields (omit section 5)
10  Chapter 28 - Continued
11  Chapter 28 - Continued
12  Chapter 28 – PLC: 1, 11, 17, 25, 44, 57
13  No class - St. Patrick’s day break
17  Chapter 29 - Magnetic Fields Due to Currents (omit section 6)
18  Chapter 29 - Continued
19  Chapter 29 – Continued
20  Chapter 29 – PLC: 1, 5, 35, 43, 45, 49
24–28  No classes - Spring break
31  Review and Discussion

April 1  Test #2
2  Chapter 30 - Induction and Inductance (omit sections 7 – 12)
3  Chapter 30 - Continued
7  Chapter 30 - Continued
8  Chapter 30 – PLC: 1, 5, 6, 13, 31, 37
9  Chapter 32 - Maxwell's Equation (omit sections 6-11)
10  Chapter 32 - Continued
14  Chapter 32 – PLC: 1, 3, 5, 14, 18
15  Chapter 33 - Electromagnetic waves (omit sections 5 & 6)
16  Chapter 33 – Continued
<table>
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<tr>
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<th>Chapter 33 – Continued</th>
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<tbody>
<tr>
<td>21</td>
<td>Chapter 33 – PLC: 32, 45, 49, 51, 57, 69</td>
</tr>
<tr>
<td>22</td>
<td>Chapter 34 – <strong>Images (omit section 6 and 9)</strong></td>
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<tr>
<td>23</td>
<td>Chapter 34 - Continued</td>
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<td>24</td>
<td>Chapter 34 - Continued</td>
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<td>28</td>
<td>Chapter 34 - Continued</td>
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<td>29</td>
<td>Chapter 34 – PLC: 2, 7, 41, 58, 90, 92</td>
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<td>30</td>
<td>Review and Discussion</td>
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<td>1</td>
<td><strong>Test #3</strong></td>
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<td>5</td>
<td>Chapter 35 - <strong>Interference</strong></td>
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<td>6</td>
<td>Chapter 35 - Continued</td>
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<td>7</td>
<td>Chapter 35 – Continued</td>
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<td>8</td>
<td>Chapter 35 – PLC: 11, 19, 25, 37, 39, 79</td>
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**Final Exam**  **Wednesday May 14, 2014 at 4-6 in room Physics 104**