PHY 2048-0002 – Fall 2015  
Mo, We, Fr 9:30 – 10:20 pm, MSB 260  
Physics Department  
University of Central Florida

Instructor: Dr. Leonid Chernyak  
PS 406  
chernyak@physics.ucf.edu  
(407) 823-6935

Office Hours:  
Tuesday 12 p.m. – 1:30 p.m.  
Thursday 12 p.m. – 1:30 p.m.

Text Book:  
‘Physics for Scientists and Engineers’ by Raymond A. Serway and John W. Jewett, 9th Edition  
(The ‘Student Solutions Manual’ is recommended as learning aid).  
Also required: WebAssign login.

Course Outline:  
PHY 2048 is first of a two-semester calculus-based general physics course. This is a three credit hour course. The course is quite intense and will require you to invest considerable time in study and problem solving.

Expectations:  
The minimum mathematics required is a working knowledge of vector algebra, and some vector calculus; Cartesian, and polar coordinates. Good knowledge of geometry and trigonometry is required as well as differential and integral calculus. It is vital that you are familiar with these, and that you can apply them to problem solving. To obtain maximum benefit from this course you should read the material before and after it is covered in class. It is very difficult to catch up if you fall behind. Keep current and do not hesitate to seek help when needed.

Attendance:  
Regular attendance is imperative.

Structure:  
The course comprises a set of lectures, unannounced quizzes, homework assignments, mid-term examinations, and a comprehensive final exam.
**Homework:** An average of 5 to 10 problems will be assigned each week. You will have approximately seven days to work on these, and submit your results. Small groups are acceptable, but you will need to report individually. We will be using a Web based system called WebAssign so be sure to obtain a login from the bookstore. More details about WebAssign will be given in a separate page.

**Quizzes:** There will be several unannounced quizzes. They will be short, one to three questions (fifteen minutes), without book or any other help. You are required to bring pen and calculator for the quizzes to every class. **As one quiz will be dropped from the final grade there will be no make-up quizzes!**

**Examinations:** There will be three mid-term examinations, and a comprehensive final. All examinations are without books. You will be allowed to prepare a two-page list with appropriate equations. University justifications must be provided if not present.

**Grades:** The final grade will be calculated according to the following scheme:

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Homework (WebAssign)</td>
<td>10 %</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10 %</td>
</tr>
<tr>
<td>Labs</td>
<td>20%</td>
</tr>
<tr>
<td>Mid-Term exams (three)</td>
<td>45%</td>
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<tr>
<td>Final exam</td>
<td>15 %</td>
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**Grading Scale:**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>85 – 100</td>
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<tr>
<td>B</td>
<td>75 – 84</td>
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<tr>
<td>C</td>
<td>60 – 74</td>
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<tr>
<td>D</td>
<td>50 – 59</td>
</tr>
<tr>
<td>F</td>
<td>00 – 49</td>
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</tbody>
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Tentative Schedule

Chapter 2                    1-D Motion
Chapter 3                    Vectors
Chapter 4                    2-D, 3-D Motion
Chapter 5                    Force & Motion

**Examination #1**

Chapter 6                    Circular Motion
Chapter 7                    Kinetic Energy, Work
Chapter 8                    Energy Conservation
Chapter 9                    Center of Mass

**Examination #2**

Chapter 10                   Rotational Motion
Chapter 11                   Angular Momentum

**Examination #3**

Chapter 12                   Equilibrium

**Final Exam**

Friday, December 11, 2015, 7:00 AM – 9:50 AM

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**Important Dates**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Classes Begin</td>
<td>August 24</td>
</tr>
<tr>
<td>Drop/Add</td>
<td>August 27/28</td>
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<tr>
<td>Grade Forgiveness Deadline (ends at 11:59 p.m.)</td>
<td>November 2</td>
</tr>
<tr>
<td>Last Day for Full Refund (ends at 11:59 p.m.)</td>
<td>November 2</td>
</tr>
<tr>
<td>Withdrawal Deadline (ends at 11:59 p.m.)</td>
<td>November 2</td>
</tr>
<tr>
<td>Classes End, Last Day to Remove Incomplete</td>
<td>December 7</td>
</tr>
<tr>
<td>Final Examination Period</td>
<td>December 9-15</td>
</tr>
<tr>
<td>Grades Due (noon)</td>
<td>December 18</td>
</tr>
<tr>
<td>Grades Available at MyUCF (begins at 9 a.m.)</td>
<td>December 21</td>
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</tbody>
</table>
Using WebAssign:

To self-enroll for a class (Class Key: ucf 4284 9966)

1. Go to the WebAssign login page (www.webassign.net), and click **I have a Class Key**.
2. Enter the class key your instructor gave you, and click **Submit**.
3. On the verification page, check the class information and determine whether or not the correct class and section is displayed.
   - If the correct class and section is listed, click **Yes, this is my class** and go to step 4 on page
   - If the listed class or section is not correct, click **No this is not my class**. Try entering your class key again, in case you might have mistyped a character. If the correct class is still not displayed, contact your instructor.

4. If you have an existing WebAssign account, select **I already have a WebAssign account**, type the **Username**, **Institution**, and **Password** for your account, and click **Continue**.

   You are enrolled in the class and logged in to WebAssign using your existing account.

5. If you do not have an existing WebAssign account, you can create one now.
   a) Select **I need to create a WebAssign account**, and then click **Continue**.
   b) Type the username that you would like to use for your WebAssign account in the **Preferred Username** field, and click **Check Availability** to see if the username that you want is available. Usernames are not case-sensitive, so BobSmith, bobSmith, and bobsmith are all the same username.
   c) After confirming the availability of your new username, type a password in both the **Choose a Password** and **Confirm password** fields.

   Ensure that your password meets the displayed requirements, which might be different than those shown above. Passwords are case-sensitive, soIAmCa3sar is not the same as iamca3sar.
   
   (d) Enter your **First Name**, **Last Name**, **Email Address**, and your **Student ID Number**. *(This is important if you want your grades recorded after the class is complete)*
   (e) Click **Create My Account**.