

**PHYSICS 1510**  
**General Physics with Calculus**  
**Fall 2017**

Lecture Section 001, PHYS 104, TR 12:30 pm - 1:50 pm  
Recitation Section R 2:00 pm - 2:50 pm

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**Professor:** Vincent Lopes  
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**Office Hours:** T 2:00 pm -3:00 pm, W 10:30 am – 11:30 am, and by appointment

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**Course Materials:**

The text book is *Principles of Physics*, 5<sup>th</sup> (Serway and Jewett). In addition, you are required to obtain access to the WebAssign online homework system. The book and WebAssign may be purchased together.

Course materials: <http://www.cengagebrain.com/course/2228442>

**Topics:**

This course will cover Newton's Laws, as applied to translational and rotational motion, the properties of mechanical and sound waves, and fluid dynamics.

**Physics 1510 Core Objectives:**

This course satisfies the core course requirement by fostering skills associated with four core objectives:

- 1) **Critical thinking** - analysis, evaluation, and synthesis of information.
- 2) **Effective communication** - development, interpretation, and expression of ideas through written, oral, and graphical means.
- 3) **Quantitative skills** - the ability to compute and manipulate quantitative data and to reach meaningful conclusions.
- 4) **Teamwork** - the ability to consider different points of view and to work effectively as a team.

**Class Policies**

- 1) Students are to attend class and recitations regularly as scheduled. (This will be part of your grade.)
- 2) Students are to be prepared for class (read/review assigned chapters prior to lecture).
- 3) This is a professional environment. Students are to be respectful of the instructor and other students. No vulgar language or rude behavior will be tolerated.
- 4) Pertinent questions should be directed to the instructor. Patience with other student's questions is expected behavior.
- 5) *Classes will start at the assigned time. Students who arrive late should enter quietly and sit down, Do not walk between the instructor and class across the front of the room as it is disruptive and disrespectful to the instructor and fellow students. Tardy students will not be given any additional time on test or Final Exam days.*
- 6) Students are expected to participate by answering in-class questions, and taking weekly written recitation quizzes.
- 7) Silence mobile phones prior to attending class. Put mobile phones away.

**Tests and Final Exam:**

- 1) Tests and the Final Exam questions will be based on lecture material, material contained in the text and in the homework assignments. Four tests will be given during the semester and a 2-hour comprehensive final exam ( **December 14th from 10:30 am to 12:30 pm**) will also be given. **THERE WILL BE NO MAKEUPS for TESTS and FINAL EXAM.**
- 2) The lowest test grade will be dropped and highest three tests grades will be used to calculate the course grade. The final exam will consist of equal portions from each of the regular exams plus any material covered after the last regular test. If one (1) regular test is missed, that test will count as the lowest test grade and will be dropped. A second missed test will be given a score of zero(0) unless a valid excuse is accepted by the instructor. The grade for the excused second missed test will be determined by the percentage correct of the problems on the final exam relating to that particular test.\* If more than two tests are missed, grades of zero will be given for the additional tests, regardless of the excuse.
- 3) Students are to provide their own pencil, eraser, ink pen and calculator. Phone calculators CANNOT be used.
- 4) Students CANNOT share pencils, erasers, pens or calculators during tests or final exam.
- 5) Multiple answers to the same question will be marked wrong automatically.
- 6) Answers / work deemed to be illegible by the instructor will be marked wrong.
- 7) Questions pertaining to the grading of tests questions and problems must be directed to the instructor in writing within two weeks after the tests are returned to the class.

**Homework:**

In this course you will be using WebAssign, an online homework program.

**Grades:**

The course grades will be calculated as follows:

Average of 3 best Tests grades.....	60%
Final Exam.....	20%
Home Work.....	15 %
Class/Recitation Participation.....	5%

Letter grades will be assigned on the basis of the following numerical scores:

90 - 100 = A
80 - 89 = B
70 - 79 = C
60 - 69 = D

Grades will NOT be rounded or scaled.

89.99 = B
69.99 = D

**Lab Credit:**

You must enroll separately in Physics 1530 for laboratory science credit.

**Topic Schedule – the instructor reserves the right to amend the topic schedule.**

1	29-Aug	T	Introduction; Ch. 1, Units, Physical Quantities
2	31-Aug	R	Ch. 1, Vectors
3	5-Sep	T	Ch. 2 Linear Motion
4	7-Sep	R	Ch. 2, continued
5	12-Sep	T	Ch. 3, Motion in Two Dimensions
6	14-Sep	R	Ch. 3, continued
<b>7</b>	<b>19-Sep</b>	<b>T</b>	<b>Test # 1 Chap 1 - 3</b>
8	21-Sep	R	Ch. 4, Newton's Laws of Motion
9	26-Sep	T	Ch. 4, continued
10	29-Sep	R	Ch. 5, Applications of Newton's Laws
11	3-Oct	T	Ch. 6, Work and Energy
12	5-Oct	R	Ch. 6, continued and Chap 7 Potential Energy & Energy Conservation
<b>13</b>	<b>10-Oct</b>	<b>T</b>	<b>Test # 2 Chap 4 - 6</b>
14	12-Oct	R	Ch. 7, continued
15	17-Oct	T	Ch. 8, Collisions
16	19-Oct	R	Ch. 8, continued
17	24-Oct	T	Ch. 10, Rotational Motion
18	26-Oct	R	Ch. 10, continued
19	31-Oct	T	Ch. 10, continued
20	2-Nov	R	Ch. 12, Oscillatory Motion
<b>21</b>	<b>7-Nov</b>	<b>T</b>	<b>Test # 3 Chap 7 - 8, 10</b>
22	9-Nov	R	Ch. 12, continued
23	14-Nov	T	Ch. 13, Mechanical Waves
24	16-Nov	R	Ch. 13, continued and Ch. 14 Superposition and Standing Waves
25	21-Nov	T	Ch. 14, continued
	23-Nov	R	<i>No class – Thanksgiving Holiday</i>
26	28-Nov	T	Ch. 15, Fluid Mechanics
27	30-Nov	R	Ch. 15, continued
<b>28</b>	<b>5-Dec</b>	<b>T</b>	<b>Test # 4 Chap 12 - 15</b>
29	7-Dec	R	Open
<b>Final</b>	<b>14-Dec</b>	<b>R</b>	<b>FINAL EXAM —Comprehensive— 10:30 AM to 12:30 PM, PHYS 104</b>

## Homework:

- 1) In this course you will be using WebAssign, an online homework program.
- 2) Class Code: unt 2879 3925
- 3) Customer Support
  - a. ONLINE: [webassign.secure.force.com/wakb2](https://webassign.secure.force.com/wakb2)
  - b. CALL: 800.955.8275
- 4) Video link showing to register in WebAssign: <https://play.vidyard.com/WuQeps5jUErLbnEzRzJEDy>

This Quick Start Guide provides information to help you start using WebAssign.

## ENROLL WITH A CLASS KEY

Your instructor might give you a class key like MYSCHOOL 1234 5678 to enroll in your class. A class key does not verify payment.

Enroll yourself in each class section only once.

1. Go to <https://webassign.net/login.html> and click **Enroll with Class Key**.
2. Enter your class key and click **Enroll**.
3. If the correct class and section is listed, click **Yes, this is my class**.
4. Sign in or create your account.

### I Have a Cengage Account

1. Type your Cengage username and password.
2. Click **Sign In**.
3. When prompted, either sign in to your existing WebAssign account or create a new WebAssign account.

### I Have a WebAssign Account

1. Click **Sign in with your WebAssign username**.
2. Type your WebAssign username, institution code, and password.
3. Click **Continue**.
4. If prompted, [link your WebAssign account to a Cengage account](#).

### I Don't Have an Account

1. Click **Create Account**.
2. Type the details for your new Cengage account.

**BEST PRACTICE:** Use your email address as your username.

3. Read and acknowledge your acceptance of the Cengage service agreement.
4. Click **Create Account**.

You are signed in to WebAssign with your new account and enrolled in your class.

## I DON'T HAVE A CLASS KEY

You don't need to enroll yourself or create your WebAssign account.

## SIGN IN

1. Go to <https://webassign.net/login.html>.
2. Type your Cengage username and password.
3. Click **Sign In**.

## PURCHASE ACCESS

WebAssign gives you free access for two weeks after the start of class. To continue using WebAssign after that, either enter an access code or purchase access online.

**NOTE:** An Access Code included with some textbooks verifies that you have already purchased WebAssign access.

### I have an access code

1. Verify your access code at [webassign.net/user\\_support/student/cards.html](https://webassign.net/user_support/student/cards.html).
2. Sign in to WebAssign.
3. Select **enter an access code**.
4. Select your access code prefix.
5. Enter your access code and click **Continue**.

### I do not have an access code

1. Sign in to WebAssign.
2. Select **purchase access online** and click **Continue**.
3. Select items to purchase, confirm any license agreements, and click **Enter payment information**.
4. Provide your payment and contact information to PayPal and click **Continue**.
5. Review your order and click **Complete purchase**.
6. Close your receipt and start working in WebAssign.

## LEARN

Your current assignments are listed on the **Home** page for each class.

1. Click the assignment name.
2. Answer the assignment questions.  
WebAssign supports many different question types. Some questions display a tools palette or open in a new window.
3. Submit your answers.
4. Review your marks and feedback.  
Usually you will see ✓ or ✗ for each answer.
5. Change your incorrect answers and submit again.
6. When you are done, always click **Log out**.

### **Physics 1510 Learning Strategies:**

- 1) **Read the text chapter and review the lecture power points within the forty-eight hours prior to the class.**  
You should bring your questions to class or e-mail to the instructor prior to the morning of the class.
- 2) During class, **listen, observe, take notes, analyze, discuss with peers, answer questions, solve in-class problems. (Again, silence your mobile phone and put it away.)**
- 3) **Review your textbook chapter summary and your notes** within twenty-four hours after class.
- 4) **Work the assigned problems** only after you have read and reviewed the material of the chapter. If you get stuck on a problem (for instance, after 3 unsuccessful attempts, or 20 minutes of effort), move on to the next problem and bring your questions to recitation, the Physics Instructional Center help room, or your instructor.
- 5) **Communicate with your instructor** via e-mail at [Vincent.Lopes@unt.edu](mailto:Vincent.Lopes@unt.edu) or during office hours whenever you have an observation or question.
- 6) **Come to class prepared!**
- 7) **Work extra practice problems**, such as from the text's end-of-chapter problems.

To learn more about campus resources and information on how you can achieve success, go to [succeed.unt.edu](http://succeed.unt.edu).

### **Ancillary Information**

#### **Academic Accommodations**

*The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at <http://www.unt.edu/oda>. You may also contact them by phone at [940.565.4323](tel:940.565.4323).*

**Drop information** is available in the schedule of classes at:

<http://registrar.unt.edu/registration/schedule-of-classes>

UNT's policy on **Academic Dishonesty** can be found at:

<http://www.vpaa.unt.edu/academic-integrity.htm>

**Blackboard** will be used to post some useful course materials and your grades. To get to this resource, go to <http://learn.unt.edu> and follow the UNT link to log on. (You will log on using your UNT EUID and password.) Once logged on, select this course. You will find an electronic copy of this syllabus, copies of the PowerPoint presentations from lecture, test expectations and equation sheets.

**Tutors** are available in Physics Room 209 Monday through Wednesday from 10 a.m. to 6 p.m., Thursday from 10 a.m. to 8 p.m., and Friday from 10 a.m. to 5 p.m., to assist you with questions related to solving homework problems.

#### **Course Evaluation**

*The Student Perceptions of Teaching (SPOT) is a requirement for all organized classes at UNT. This short survey will be made available to you on-line at the end of the semester and will provide you with an opportunity to provide feedback to your course instructor. SPOT is considered to be an important part of your participation in this class.*

After logging in to the [my.unt.edu](http://my.unt.edu) portal, students can access the SPOT survey site by clicking on the SPOT icon. A list of their currently enrolled courses will appear. Students complete each course evaluation independently. The SPOT Fall 2017 administration dates are November 20th (Monday) to December 7th (Thursday).