



Course Syllabus

Course:	Physics 101	Course Code:	PHY101
Instructor:	Stephen Richardson, MAT	Contact Phone:	951.807.7598
Start Date:	05/08/13	E-mail:	srichardson@plattcollege.edu
End Date:	06/11/13	Other Contact:	
Class Days:	Monday & Wednesday	Hours:	7:45 pm – 1:45 pm
Prerequisite:	Concurrent enrollment in Math 102		
Textbook:	Tillery Bill. W. Physics-Physical Science 9th Edition. McGraw-Hill Companies, 2012, ISBN: 0-07-749666-3		
Materials:	notebook, scientific calculator, pen or pencil, and lined paper		

Course Description

Physics 101 is an introductory class designed to provide a foundational knowledge in a variety of topic areas in Physics. The course contains a comprehensive study of measurement, density, an introduction to Newton's laws of motion, gravity, the conservations of energy, work, power, and momentum. The course additionally includes topics in heat and temperature, electricity, sound, and light. All topics studied include an emphasis on problem solving, dimensional analysis, and the application of mathematics in each topic area.

Course Objectives

1. Appropriately apply significant figures, use the metric prefixes and scientific notation, and perform unit conversions within the English and SI systems, including conversion from English to SI or SI to English
2. Use the mass-density relationship to solve a variety of density problems
3. Solve motion problems involving speed, velocity, acceleration, angular speed, and momentum
4. Solve force problems involving Newton's Laws of motion, gravity, weight, and circular motion
5. Solve problems involving work, kinetic energy, potential energy, power, and the conservation of energy
6. Identify various forms of energy and explain how energy is transformed
7. Describe kinetic molecular theory and heat flow and identify examples of conduction, convection, and radiation
8. Make conversions within the Celsius, Fahrenheit, and Kelvin scales for measuring temperature
9. Compute the amount of heat in an energy form conversion and perform calculations involving latent heat of fusion and vaporization
10. Describe different types of waves and explain how sound travels through a particular medium
11. Perform calculations involving frequency and period for a vibration
12. compute the speed of sound in different temperatures and compute the distance between a perceived sound and the source of the sound
13. Compare and contrast an echo and reverberation
14. Define charge, current, electrical potential, resistance, and power and apply Ohm's Law to circuits
15. Describe the properties of light and how light interacts with matter

Daily Schedule

Day	In Class Topics/ Reading Covered	Textbook Sections/Exercises
Day 1	Ch 1 – Measurement, equations, units and density	Applying the Concepts Questions and Parallel Exercises A and B (Ch 1)
Day 2	Ch 2 – Speed, velocity, acceleration, Newton’s Laws of motion	Applying the Concepts Questions and begin Parallel Exercises A and B (Ch 2)
Day 3	Ch 2 cont.- Newton’s laws of motion, velocity, acceleration, force, gravity, weight, , and momentum	Applying the Concepts Questions and Parallel Exercises A and B (Ch 2 cont.)
Day 4	Ch 2 cont.- Angular and Linear Speed Relationships Ch 3 – Energy, Work, and Power	Applying the Concepts Questions and Parallel Exercises A and B (Ch 3)
Day 5	Ch 3 cont.– Energy, Work, and Power Exam #1	Applying the Concepts Questions and Parallel Exercises A and B (Ch 3 cont.) Review for Midterm
Day 6	Ch 4 – Heat and Temperature	Applying the Concepts Questions and Parallel Exercises A and B (Ch 4)
Day 7	Ch 4 cont. Heat and Temperature Ch 5 – Waves Motions and Sound	Applying the Concepts Questions and Parallel Exercises A and B (Ch 4 & 5)
Day 8	Ch 6 – Electricity	Applying the Concepts Questions and Parallel Exercises A and B (Ch 6)
Day 9	Ch 6 cont. – Electricity, Introduction to Light, and Exam #2	Applying the Concepts Questions and Parallel Exercises A and B (Ch 6 cont.)
Day 10	Final Presentations	Notebook Check

Grading Rubric

	Percentage of Total Grade
Attendance	18%
Note: Each absence will result in a 9% reduction of the total grade, arriving to class late or leaving early will result in a 3% reduction of the total grade.	
Homework Assignments & Class Work	20%
Notebook and Participation	8%
Exam #1	22%
Exam #2	22%
Presentation	10%
Total	100%

Grading Guidelines

Assignments with major errors or omissions may be returned for corrections, completion, or be given a zero/fail grade. Assignments with minor detail or other non-conceptual errors will be graded as submitted. Due dates will be given for

each assignment. If a student is absent from class when that assignment is due, the assignment will be accepted only if the instructor is given sufficient notice and agrees to accept the assignment in addition, the assignment is due IMMEDIATELY upon return.

Make-up quizzes, assignments and exams are generally not allowed. They may be granted at the instructor's discretion, but such examination must be taken on the student's own time (i.e. not during regularly scheduled class time) and for one grade lower than they would have otherwise received.

Lastly, instructors reserve the right to change the daily schedule to accommodate the pace of the course and to adjust due dates as necessary. **It is the student's responsibility to attend every class in order to stay informed of any possible changes.**

Attendance Policy

Attendance in all scheduled courses is essential for academic achievement. Perfect attendance – no absences, tardies or early departures – is encouraged as punctuality develops within a student a sense of responsibility that will have a positive impact upon his or her professional career. Attendance is tracked by the quarter hour. These increments accumulate over the length of the module and are added together to determine the total number of hours a student is absent. Platt College does not have an excused/unexcused absence policy. Students are responsible to attend all scheduled class sessions.

Attendance is directly linked with the final grade a student receives in this course. If a student misses more than 20% of the scheduled class time in this course, he/she will not be eligible to receive a grade higher than 82% (B-).

Additional, program-specific attendance requirements may also be found in the Veterinary Technology, Diagnostic Medical Sonography, and Respiratory Therapy Student Guidebooks. These guidebooks are available through their respective Program Directors.

Satisfactory Academic Progress: To maintain satisfactory academic progress toward a degree, diploma, or certificate, a student must maintain a specified grade point average and proceed through the program at a specified minimum pace. For determining satisfactory academic progress (SAP), the programs are divided into ten (10) week terms or evaluation periods. Each term is comprised of two (2) five-week modules.

At the end of each term or evaluation period, the student's cumulative grade point average (CGPA) will be determined. The student must achieve the minimum CGPA during each term or evaluation period. See chart below:

EVALUATION PERIOD	CGPA MUST BE
1	1.5
2 (and beyond)	2.0

Passing grades may vary by program, however, and students enrolled in the Vet Tech, Diagnostic Medical Sonography, or Respiratory Therapy must consult their program Guidebooks for further information.

If the students' CGPA falls below the levels specified in the chart above, he or she will be placed on Academic Probation for the duration of the term or evaluation period immediately following. Platt College shall notify the student when he or she is placed on Academic Probation and inform the student that he or she would lose eligibility for financial aid or be terminated if he or she is not able to maintain satisfactory academic progress. A student has the right to appeal a SAP decision, but only within 30 days of the final posting of grades during the module which the student failed to meet the specified grade point average.

Additionally, Federal Financial Aid regulations now require that the student also be concurrently placed on Financial Aid Probation. The student may receive any financial aid due during this initial Academic/ Financial Aid Probation period. If the student fails to achieve the required minimum CGPA at the end of this period, he or she may be withdrawn from the program and financial aid may end. See the following hypothetical situations:

If a student's CGPA falls below 2.0 at any time during their tenure with the College, he or she will be in violation of the Satisfactory Academic Progress standards above and the student will be placed on Academic Probation. In this case, the evaluation process detailed above is repeated.

In cases where a class is repeated, both classes will appear on the student transcript. Only the make-up grade will be calculated in the student's CGPA. Platt College, on a case-by-case basis, reserves the right to accelerate the above policy on Satisfactory Academic Progress to include immediate termination of a student's enrollment if determined to be warranted by the College.

Required Completion Rate: In addition to maintaining the CGPA specified above, students must progress toward completion of the program within a specified timeframe.

A student's completion rate is measured at the end of a term or evaluation period. All credits attempted, including repeated courses, incomplete courses, withdrawn courses, and remedial courses will be counted as credit hours attempted. If the student has not completed two-thirds (2/3) of the cumulative credit hours attempted to date, the student is in violation of SAP and will be placed on Academic Probation. The student may receive any financial aid due during this initial Academic Probation period. If, at the end of the next immediate term or evaluation period, the student has not raised the completion rate to two-thirds (2/3) of the cumulative hours attempted, he or she may be withdrawn from the program and will no longer be eligible to receive financial aid.

It should be noted that students are expected to complete the requirements for their course of study in the scheduled timeframe not to exceed 1.5 times the length of the program. Each individual case will be evaluated should the above standard be unattainable. The Director of Regulatory Affairs reserves the right to make final determinations based on the extenuating circumstances presented.

Students receiving Veterans Administration benefits must complete their program within the originally contracted length of time or number of units. Students receiving Veteran's Benefits who fail to achieve the required CGPA by the end of the probation period will have their Veteran's Benefits interrupted and the DVA will be notified.

Satisfactory Academic Progress Appeal Process: A student may appeal the determination of Satisfactory Academic Progress and the termination of Financial Aid to the Academic Dean based upon extenuating circumstances within 30 days of the event in question.

Re-Entry Policy: Students who have been dismissed for lack of satisfactory academic progress or for violation of the attendance policy may apply to be readmitted to the institution in the same program. The re-entry will be at the discretion of the Academic Dean, upon a showing by the student that circumstances presently exist that are more conducive to the student's academic success. If granted, the re-entry will be for a five-week probationary period, at which time the Academic Dean will make a final decision regarding the readmission.

Attendance Policy: Attendance in all scheduled courses is essential for academic achievement. Perfect attendance – no absences, tardies or early departures – is encouraged as punctuality develops within a student a sense of responsibility that will have a positive impact upon his or her professional career. Attendance is directly linked with the final grade a student receives in a course as defined by that course syllabus. Should absences exceed what is defined as acceptable in any course, the student may receive a failing grade for the course. The student is financially responsible for repeating a course in which a failing grade was issued. Financial aid may not cover the repeated course. Attendance is taken each day at Platt College. Attendance is tracked by the quarter hour. These increments accumulate over the length of the module and are added together to determine the total number of hours a student is absent. Students are responsible for notifying their instructor, or Registrar, Lead Instructor, or Dean of Academics if they are going to be absent from school. Students are encouraged to make non-school personal appointments at times that will not conflict with their scheduled classes.

Additional, program-specific attendance requirements are listed in each course syllabus, and may also be found in the Veterinary Technology, Diagnostic Medical Sonography, and Respiratory Therapy Student Guidebooks. These guidebooks are available through their respective Program Directors.

Platt College does not have an excused/unexcused absence policy. Students are responsible to attend all scheduled class sessions.

8-Consecutive Days of Absence: Students who are absent from school for eight (8) consecutive days during which classes are scheduled, will be discontinued from their program for non-attendance. Students receiving Veterans Administration benefits who violate any provision of the attendance policy will have their Veteran's Benefits interrupted and the DVA will be notified.

Plagiarism: Plagiarism means using another person's work, writing, words, ideas, research, graphics, programs, music, pictures, data, and/or other creative expression without giving the other person full credit. Students must enclose another person's words in quotation marks, cite the appropriate source(s), and give citations when using the ideas of another person, even if those ideas are paraphrased. Platt College reserves the right to utilize outside anti-plagiarism resources to evaluate the originality of student work. Any

student found guilty of plagiarism may be subject to disciplinary actions. Those disciplinary actions may include failing and repeating the course, suspension, and/or termination from the program. If a student has to repeat a course, financial aid may not cover that course.

Using words, ideas, computer code, or any work by someone else without giving proper credit is plagiarism. Any time information from a source is used, it must be cited.

Plagiarism and the Internet: The Internet has become a very popular resource for information for student assignments. The same rules regarding plagiarism that apply to a printed source also apply to resources found on the Internet. When a student refers to work, writing, words, ideas, and the like or quotes from an internet site, he or she must cite that source. Many of the same rules apply when using visual information from an internet site; the source of the visual information or graphic must be cited.

Useful Strategies to Avoid Plagiarizing Another Person's Work: If words, sentences, phrases, and the like are copied from a text, put what is copied in quotation marks. This is especially important when taking notes.

When paraphrasing, do not just rearrange or change a few words. A useful technique is:

1. Read the area to be paraphrased carefully;
2. Cover up the text or close the book or computer page so the words cannot be seen;
3. Write out the idea in your own words without referring back to the words
4. Check the attempt at paraphrasing against the original text to be sure the same phrases or words have not been used and that the information is accurate.

At times students accused of plagiarism claim that their plagiarism occurred without their knowledge or intent. Since ignorance of this fundamental rule is not a reasonable defense, it is best to become thoroughly familiar with the various ways in which plagiarism can occur and ways to avoid plagiarizing someone's work. If there are any doubts or questions, take the responsibility to ask the instructor for clarification.

If found guilty of plagiarizing, a student may be subject to disciplinary actions up to and including suspension or termination from the program.

Grading

Letter Grades, Percentages and Grade Point Averages

Students are assigned letter grades (A through F) in their course work for each class attempted. The instructor uses a percentile breakdown and assigns final letter grades (see accompanying chart). Students may complete a class with a D – (.7). However, to graduate, a student must attain a minimum cumulative grade point average of 2.0 (C). **Additional, program-specific grading requirements may also be found in the Diagnostic Medical Sonography and Respiratory Therapy, and Veterinary Technology Student Guidebook. These Guidebooks are available through the respective Program Directors at each Campus Location.**

A Grade Point Average (GPA) is calculated from the letter grade using the following values:

<u>Letter Grade</u>	<u>Percentile Range</u>	<u>Percentile Entered</u>	<u>Grade Point Assigned</u>
A	96-100	100	4.0
A-	90-95	95	3.7
B+	87-89	89	3.3
B	83-86	86	3.0
B-	80-82	82	2.7
C+	77-79	79	2.3
C *	73-76	76	2.0
C-	70-72	72	1.7
D+	67-69	69	1.3
D	63-66	66	1.0
D- **	60-62	62	0.7
F	<59.9	50	0.0
W	N/A	N/A	0
T/C	N/A	N/a	0

* Minimum cumulative grade point average for entire course for a student to qualify for graduation.

** Minimum grade to pass any course (although this may be higher for certain programs, see program specific Guidebooks).

Expanded Grade Symbol Definitions:

- A: (Excellent)** Meeting course requirements with a superior level of performance.
- B: (Good)** Meeting course requirements with a high level of performance.
- C: (Satisfactory)** Meeting course requirements with an acceptable level of performance.
- D: (Unsatisfactory)**
- F: (Failing)** Repeat course.
- W: Withdrawal**
- TC: Transfer Credit**

Grade of Incomplete: Platt College does not issue a grade of incomplete on the Student Progress Report or on the Student Transcripts.

Make-up Work: All student work, assignments, quizzes, tests or projects must be completed and submitted on or before the final day of any module. The acceptance of any late or make-up work is at the sole discretion of the Instructor.

Final Grades: A Student Progress Report will be provided to each student within two (2) weeks of the final day of each five (5) week module. A student may request a Student Progress Report at any time by informing the Registrar. The Report will be prepared within one business day of the request. The student can pick up the Student Progress Report from the Registrar or request that it be mailed. Platt College may withhold a student's official transcript if the student is in default on a student tuition contract.

Grade Appeal Policy: Students may appeal a grade received in a class through the following steps: (a) The student must communicate with the faculty member that issued the grade, within 24 hours of receipt of the grade; (b) If the faculty member denies the requested grade change, the student may appeal, in writing, to the Academic Dean (or designee) within 24 hours of the denial by the faculty member; (c) Within 24 hours of the receipt of the written appeal, the Academic Dean (or designee) will meet with the faculty member to discuss the student's appeal, and review the supporting documentation provided by the student; (d) The Academic Dean will then make a final recommendation, which may be confirmed by the faculty member, e) if the Academic Dean does not receive the confirmation of the faculty member, then the final decision will be made by the Director of Regulatory Affairs or their designee.

Class Withdrawals: A withdrawal ("W") is issued to any student who is withdrawn from a class voluntarily or involuntarily. A "W" is calculated for credits attempted, but is not calculated in a student's grade point average (GPA). The Dean of Academics, or designee, must approve all class withdrawals.

Withdrawing from any class after the first 20% of scheduled hours may result in a grade of "F" and an additional charge based upon the current tuition rates for repeating the class. If a student is placed on leave of absence after the first 20% of scheduled hours, that student may also receive a grade of "F" and may also incur the additional charge for repeating the class.

Course Repetition: The Dean of Academics, or designee, will advise students who are failing one or more courses. A course may be repeated when the grade received was a D. A course must be repeated when the grade received was an F or when the student received a W. If a student needs to repeat a course, he or she will be referred to the Dean of Academics, or designee, and to the Financial Aid department to discuss the funding of the repeated course. Students repeating courses will be charged for the specific course or courses. In computing the grade point average, only the most recently earned grade points will be used.

Cumulative Grade Point Average Required for Graduation: Graduation from Platt College requires a minimum cumulative grade point average of 2.0 (C). Complete graduation requirements are described in the Graduation Requirements section of this catalog.

Leave of Absence Policy: Platt College offers accelerated programs of study. As such, Leaves of Absence are discouraged, and are only granted for unique and serious situations. Written requests for Leaves of Absence should be presented to the Academic Dean (or designee), and may be granted for a maximum of 180 days in any 12-month period. The commonly acceptable grounds for a Leave of Absence are: medical emergency (including pregnancy), military service, and course scheduling. In the case of a request for a leave for medical or disability reasons, Platt College will make any reasonable effort to accommodate each student's request. During the leave of absence period, the student is obligated to continue to make their normally scheduled student loan payments. Students failing to return from a Leave of Absence will be dropped from the program.