

**Authors Note:** This document was prepared by Priscilla Laws for distribution to students at Dickinson College enrolled in an Explorations in Physics Course. This will have to be modified to conform to your own course management philosophy and local conditions. You are welcome to use/modify it as you wish.

### ***Explorations in Physics Homework Assignments***

*How often is homework assigned and how long does it take to complete?*

After almost every class session during the guided inquiry portion of the course there will be a homework assignment. The number of the homework set that is to be completed after a class section is listed on your syllabus. Sometimes you will need to finish activities you started during class before starting the homework. This out-of-class work will typically take 1 or 2 hours to complete after each class session. A typical student can expect to work about 3 to 5 hours per week on homework.

We have found a strong correlation between the steady effort needed to successfully complete homework and performance on examinations.

*What kinds of assignments are given?*

Some of the homework assignments will consist of questions based on class activities, others are written exercises involving simple reasoning and mathematics, some may be based on observations or experiments you can do at home, and others will be fairly difficult mathematical problems. At times you will need to use the classroom to do computer assignments.

**Note:** Spreadsheet homework will be done using the popular Microsoft Excel software. *If you have*

*recent version of Microsoft Office on your own computers, ask your instructor about getting a free copy of the WPTools--a set of custom Excel tools for either your Mac or Windows computer.*

#### **HOW TO SUBMIT HOMEWORK:**

Some homework assignments will be listed as Computer-based Assignments and some homework will be listed as paper assignments.

**COMPUTER-BASED ASSIGNMENTS:** Most of your homework assignments will be computer-based and you will be accessing these assignments from the Science 101AE Blackboard site at:

<http://courseinfo.dickinson.edu/>

To log on use your *local* email address (usually your last name or your last name and first initial) as your username. Next you'll need to enter a password. If you do not already have a password then your initial password is the *same* as your username.

Once you have logged on are on go to the right-hand side of the screen and select this course.

NOTE: (1) If you used your username as a password when you logged on, you should change your password. (2) For more detailed instructions on how to log in, change your password, etc. you can use the information posted at

<http://www.dickinson.edu/it/training/vc/bboard/stu-usingbb.shtml>

**COMPUTER-BASED Homework:** Each computer-based assignment *must be submitted by 9am on the class day after it is assigned.*

**NOTE:** If you find it impossible to successfully complete a computer-based assignment for a legitimate reason, you must do the assignment on a word processor using the guidelines for headers, etc. as outlined below for Paper Homework.

**PAPER Homework:** Paper homework assignments are to be handed in at the beginning of the next class that occurs after it is assigned.

It should be submitted as follows:

- on an 8 1/2" X 11" sheet of paper
- head the assignment with your name, the due date, and course no. (Sci 101AE)
- the set number should be listed at the top of the page and to the left of each answer
- you should draw a box around your final answer
- all the pages should be numbered and stapled together

A sample of the required format is shown on the right. You will lose credit if you do not follow the format.

**Notes:** (1) In order to get full credit on a mathematical problem, the solution should contain a diagram of the physical situation, a brief written description of the situation, and calculations. (2) Points on an assignment will be taken off unless the requested format shown is used.

The image shows a sample homework page layout. At the top right, there is a header with the following information: Name -> Jill Student, Due Date -> 9/23/97, and Course -> Sci 101. Below this, the exercises are listed as "Exercises 5-1, 5-2, 5-4 & 5-6" with a note that the number of points for each exercise is indicated by the number of lines. The page is numbered "5-1)" on the left. A box is drawn around the answer area, labeled "ANSWER:" and "Box for answer". The page is numbered "5-2)" on the left. At the bottom, there is a page number "Page 1".

### POINTS ALLOCATED FOR HOMEWORK

Unless otherwise noted, each numbered question or problem will be worth up to 10 points. In the case of mathematical problems full credit will be assigned for a correctly worked problem that contains a diagram, brief description of the physical situation and calculations. Occasionally when a "paper" exercise or problem is reviewed in class before the homework is collected, you can correct your work and receive credit for it. In addition for paper submissions, *you will receive at least half credit for seriously attempting to answer a question or solve a problem using diagrams, descriptions, and mathematics even if your ultimate solution is incorrect. To receive partial credit you must explain what approaches you have tried.*

### OTHER CONSIDERATIONS:

**Academic Honesty:** You are encouraged to discuss and work on homework with classmates. However, you should write out answers to questions and problem solutions using your own format, equations, and words to reflect the understanding of the assignment. As is the case for Activity Guide Entries *any student who copies homework from another student will be reported for plagiarism.*

**Homework Grading:** Both the handwritten and electronic essay homework will usually be graded by an upperclassman who has taken physics. Your grader may occasionally make an error in judgment or a mistake. *If you think this is the case, feel free to ask the instructor to review your homework assignment.* At the end of the semester your homework scores will be translated into a percentage grade. *Your percentage grade will be calculated based on all assignments.*

**Non-existence of Late Homework:** Homework solutions for the hand written homework will be made available in the late afternoon on the day an assignment is due. No late homework will be accepted under any

circumstances. In cases where you have an extended illness lasting more than three class periods with a note from the health center, you may be exempted from certain assignments. *Exemptions for illness are very rare!*