

## Quick Guide to CHIP

**CHIP** (Computerized Homework in Physics) is one of our web-based systems for you to work on the homework assignments interactively. With CHIP you can work on your homework and get it graded instantly anywhere and any time as long as you have a secure Internet connection. CHIP also serves as the official grade book for many of the introductory physics courses and as the place to register your *iClicker* if your course uses them. If your course uses CHIP for any of these functions, then you need to read this sheet as well as much more complete documentations available on-line and familiarize yourself with the way to use it.

- **CHIP account:** All students on the Registrar's roster as officially enrolled in a course using CHIP will have a CHIP account for that course created for you. You need this account to access all security-protected areas of CHIP. **CHIP accounts have the same user id and password as your ITaP career account login.** However, **you must appear on the official Registrar record as taking the particular CHIP course this semester/session** in order to be able to log in. Occasionally, the roster we use to create CHIP accounts may not be up-to-date or your registration may have been temporarily dropped due to things like the tuition payment status. In these cases, you would need to inform us to create/keep your CHIP account; you can use a CHIP **Problem Report** link (see below) for this purpose. **Problem Report** is the preferred method of communication. When you use a **Problem Report**, please make sure to fill in *all* the information requested.
  
- **Accessing CHIP:** Each course using CHIP has a separate CHIP homepage; e.g., the CHIP homepage URL for a course *PHYS yyy00* in the spring 2011 session is <http://chip.physics.purdue.edu/public/yyy/spring2011> where *yyy* is the first 3 digits of the course number (plus suffix if any, e.g., H for Honors section) such as 172, 214, 218, 220, 221, ...). The CHIP homepage is also linked from the course homepage and the Physics Department homepage. You access the CHIP homepage using any modern web browser with security and graphics enabled, such as Internet Explorer, Firefox, or Safari. (If your course has elapsed time-limited problems, your browser must also have Java and Javascript enabled.) Once on the CHIP homepage, you can click on the **Homework** link to access the homework assignments or on the **Student Gradebook** link to access the grade book. A link to the more complete CHIP **Instructions** is also located on the CHIP homepage. A **Problem Report** link is here as well as on many other CHIP pages. A CHIP login is required to access **Homework** or **Student Gradebook**, but not **Instructions** or **Problem Report** from here. Very important: **when you are finished using CHIP, you must click a logout button or quit your browser completely**, not just closing a browser window, so that no one else would use *your* account.
  
- If your course uses the *iClicker* response pads, then you must also purchase one and register its serial number in the **Student Gradebook**. Your course may have disabled other functions of the grade book until you do so.
  
- **Accessing homework assignments:** You click on the **Homework** (or **Prelabs**) link on the CHIP homepage to open a list of the homework assignments in your course. You select the assignment that you wish to work on and click on its link. The deadlines shown for each assignment are generally section /division-specific and not necessarily the same for all students in the course. Also, if you have received a special extension for an assignment, the extension will show up in green. After you click on an assignment link, the page changes to the list of problems in the assignment. You then select the problem you want to work on. You can work on the

problems in any order, and in fact do them partially and then return later to complete them at will as long as the deadline has not passed. In some courses, the problem lineup may be student-specific or there may be some other special features. Those problems that show up in green-colored links are *interactive examples* which contain extensive tutorials within them. (More on this below.)

- **Working on problems:** Your assignments may contain several different types of problems. The most common ones are numerical problems and single-answer multiple-choice problems, but some may require text or analytic formula answers or multiple answers in a multiple-choice problem. Almost all of the problems have some randomization built in so that your problems (and answers!) are different from those of your fellow students. All questions carry limits on the number of attempts to receive credits (as shown for each question), and occasionally, some courses may include problems that require you to submit all your answers at one time and within a certain span of elapsed time. These latter ones, if any, are clearly so-marked in red. You submit your answers by clicking on any one of the *Enter* buttons, *not* the carriage return key on your keyboard. One very important thing to remember: all *Enter* buttons are equivalent and any one *Enter* button will submit *all* the answers in the problem, including those you typed into *all* of the answer boxes and *all* choices you made in multiple-choice questions whether or not the particular *Enter* button is next to a particular answer box.
  - **Numerical problems:** Generally, you work out the numerical answers separately (on paper, e.g.) and just type the calculated answer. Some questions may require a certain number of significant digits or decimal places as marked. Unless a question has these requirements, you may also type in basic numeric expressions such as  $3.14*2/1500$  rather than the final number. Consult the more complete instructions (URL given at the end of this document) to find out what kinds of expressions are allowed. Unless otherwise noted, the standard error tolerance is 1%, meaning at least 3 significant figures are needed.
  - **Multiple-choice problems:** Most of these require you to choose one answer and place a dot in the corresponding radio button by clicking your mouse on it. A few may allow multiple answers to be selected; these present you with checkboxes instead, into which you place checkmarks by clicking on all those choices selected.
  - **Interactive examples (links in green):** Only the one question presented at the top of the page carries credits to be recorded. All the other questions that may come up are there to help and guide you to understand the concepts and work out the correct answer for the one scored question. Once you answer the top question incorrectly, a *Help* button shows up. Clicking on this *Help* button opens up an extensive, context sensitive tutorial. Even if you got the top question correct the first time and received the credit already, you may access the tutorial by deliberately entering an incorrect answer – don't worry, once credits are given, they remain in your records no matter what you do.
- **Student Gradebook:** Student Gradebook is where all your CHIP records (and perhaps many more) are accessed. In addition to the homework scores, viewable records typically include your roster information, lecture quiz scores, laboratory scores, and exam scores. At semester end, your letter grade may also be available there. Typically, the class-wide distributions of exam and other scores are also available. The *View Running Totals* button, if available, allows you to find your rough standing in class during the semester by showing the percentage of scores you have currently achieved.
- **Messages:** There is also a *messaging* feature in CHIP for the instructors to reach you. Sometimes an instructor may send you a message through CHIP rather than using your e-mail. Since these communications may contain very important and time-critical information (such as the exam seating arrangement or a review session announcement), you are responsible for reading every message you receive this way.
- **More complete documentation:** For more complete instructions and details of CHIP functions, please go to <http://chip.physics.purdue.edu/public/instruct.html> and <http://chip.physics.purdue.edu/public/stu/handout.pdf>