

Introduction to on-line Physics Resources

The Physics Unit of Study in which you are currently enrolled has some elements available on-line. What follows is a brief introduction to studying in this environment, including what equipment you will need to study on-line, how to find your unit of study and where to go to find help.

What Do You Need?

To study on-line you need regular access to a computer with an internet connection either at home, at the University or a local Internet Café. The University has provided six Access Labs on the main campus (see <http://www.usyd.edu.au/accesslabs/>) where you can use modern computers for modest cost. These are located in the Carslaw Building (McGrath), Education Building, Engineering Link building, Language Centre, Pharmacy Building and the Fisher Library.

If you are using your home computer or a computer off campus the *minimum* requirements are

- PC running Windows 98 Second Edition, Me, NT, 2000 or XP on a 266 MHz machine
- Macintosh OS9, OS X v10.1, 10.2 or 10.3 on a PowerMac (G3 or G4) or higher
- Modem 56k bps or faster

Note. Some of the links in WebCT and *MasteringPhysics* will always open in a new browser window. Ad-blocking (advertisement-blocking) or pop-up blocking software (probably in your browser) can stop these windows from opening. If this problem occurs, turn off ad-blocking or pop-up blocking while using WebCT and *MasteringPhysics*.

WebCT

We recommend that you use any of the following browsers (officially supported by WebCT):

- For Windows machines
 - Internet Explorer 5.0, 5.5, 6.0
 - Netscape 6.2, 7.0 and 7.1
 - AOL 7.0, 8.0 and 9.0
 - Mozilla 1.5, 1.6
- For Macintosh
 - Mac OS 9.x
 - Netscape Navigator 6.2.x
 - Microsoft Internet Explorer 5.1
 - Mac OS X:
 - Netscape Navigator 6.2.x, 7.0, 7.1
 - Microsoft Internet Explorer 5.1 (OS X 10.1.x only) and 5.2 (OS X 10.1.x and above)
 - AOL for Mac OS X
 - Mozilla 1.5, 1.6
 - Safari 1.2 (OS X 10.3.x only)

You can check your browser by following the 'Check Browser' link on the WebCT login screen.

MasteringPhysics

Students in PHYS 1001 (Regular), PHYS 1003 (Technological), and PHYS 1091/1902 (Advanced) will be using the *MasteringPhysics* system. This has its own (slightly more stringent) requirements described on the *MasteringPhysics* Home page for the unit as

- Windows: 250 MHz; Windows 98, NT, 2000, ME, XP
- Macintosh: 233 MHz; OS 9.2, 10.2, 10.3
- All:
 - 64MB RAM installed
 - **minimum 1024 x 768 screen resolution !!!**

We recommend that you use any of the following browsers:

- For Windows machines
 - Firefox 1.0, 1.5
 - Internet Explorer 5.1, 5.2, 5.5, 6.0
 - Netscape 6.2, 7.0, and 7.1
 - Mozilla 1.3, 1.6 and 1.7

- AOL 4.0 or greater (Turn off the "Use Compressed Graphics" option under My AOL>> Preferences>> WWW; Sign on using AOL. Then minimize it [do not close] and open either Internet Explorer or Netscape Navigator.)
- For Macintosh
 - Firefox 1.0
 - Netscape Navigator 6.2, 7.0, 7.1
 - Mozilla 1.2, 1.3, 1.6 and 1.7
 - AOL 4.0 or greater (Turn off the "Use Compressed Graphics" option under My AOL>> Preferences>> WWW; Sign on using AOL. Then minimize it [do not close] and open either Internet Explorer or Netscape Navigator.)
 - Safari 1.3

Required Browser Settings and Plug-Ins

- Popup blockers must be disabled.
- Javascript must be enabled.
- The latest Flash player (7 or higher) must be installed

Note for Mac users:

The latest *MasteringPhysics* version makes extensive use of Macromedia *Flash*. This may cause a problem on a Mac for problems with 8 or more parts (i.e. labelled part H or more). *MasteringPhysics* staff are working on this, but for now you may need to complete these problems on a PC or Linux machine. In any case, please inform us of the problem.

Some students may wish to take advantage of the *ActivPhysics* on-line visualisations available via the *MasteringPhysics* website. This has over 200 simulations (80% Flash, 20% Java) and 38 videos. It has very similar requirements to those for *MasteringPhysics*.

WebCT

How to Get In

Open a browser and go to either the Physics Home page (<http://www.physics.usyd.edu.au/>) or University's Current Students / MyUni page (<http://myuni.usyd.edu.au/>).

On the Physics Home page choose *Student Information* and then one of the 'Student' pages, such as Junior Physics. Apart from the information provided there, each 'Student' page has a link to WebCT, the learning environment adopted by the University. On the 'Current Students' page, click the WebCT link.

On the WebCT login page (if at home you should probably bookmark this page) you should choose *Login to WebCT with Unikey / Extro login name* and you will be asked for a Username and Password. These will be the Unikey (Extro account) Username and Password that you were sent with your confirmation of enrolment. Once you have entered the appropriate Username and Password you see the myWebCT page showing the Units of Study in which you are enrolled and which have a WebCT presence (in Physics, all Junior, Intermediate and Senior Units of Study are represented on WebCT).

What to Expect

The web is a new learning environment for most people and it's probably a good idea to have a look around when you first arrive. Explore your on-line Unit of Study and check out what information and tools are available. Remember this is a new medium and will require some adjustment to use effectively – it is not a book and it is not a classroom though it has elements of both. Be prepared to play around until you feel comfortable and don't be scared of making mistakes.

In Junior and Intermediate Physics, each Unit of Study is divided into Modules, each with a separate icon on the Unit page. In many Junior Physics units, there may be multiple lecture streams, often taught by different lecturers, but all presenting the same Module material.

The information provided for Physics Units is mostly resource material and links. Some is specific to a Unit or Module (e.g. extra notes or demonstrations), whilst some is generally useful to anyone in Junior Physics (e.g. past exam papers and solutions). Information presented will develop with time and your comments are welcome.

One important tool in this environment is called 'Communication'. Using the Communication area you can post, read and search for messages in various ways. Message may come direct to your email (see more information

below) or may be placed on a Discussion forum for all to see. You may find messages from your lecturer here as well as the collected questions, answers and comments from other students in the Unit of Study.

Students and different lecturers may use these facilities a little, a lot, or not at all. Physics staff tend to be in the 'not at all' category, but some students use the discussion or email facilities to ask questions of whoever is reading. The messages will usually be read by staff but response time is often slow.

To get the most out of the Discussions it is worth remembering three principles: Think about what other people have posted, Ask if things are unclear, and Contribute any ideas or information you have found useful. When using web-based communication tools you should also remember that there are real people on the other end. As there are no accompanying physical expressions or vocal cues to enhance communication it is worth making extra effort to ensure your messages are clear and easily understood. Inappropriate and discriminatory comments which would not be tolerated in the physical classroom are equally unacceptable in the on-line environment.

MasteringPhysics

Students in PHYS 1001 (Regular), 1003 (Technological), and 1091/1902 (Advanced) will be using *MasteringPhysics*, which may be accessed at <http://www.masteringphysics.com>. Click on the Young & Freedman book cover for *University Physics*. The first time you login you need to use the Student Access Kit that came with your textbook to choose a username and password. You also need the course ID

SUPHYS1001 for PHYS 1001 Physics 1 (Regular)

SUPHYS1003 for PHYS 1003 Physics 1 (Technological)

SUPHYS1901 for PHYS 1901 Physics 1A (Advanced)

SUPHYS1902 for PHYS 1902 Physics 1B (Advanced)

your **full Student ID number (SID)** (e.g. 306759311 or 200459311) and your **email address**. Instructions for your first login are in the booklet in the Student Access Kit, which may also be found in pdf format on the web at http://www.physics.usyd.edu.au/ugrad/MP_intro.pdf. Subsequent logins require only your chosen username and password.

ActivPhysics

ActivPhysics on-line visualisations are available via a link from the *MasteringPhysics* website. No login or password is required.

Email

The University provides you with email access based on your username. The WebCT system provides another similar email address which is internal to the WebCT system. We may use this email address to provide you with important information regarding this unit of study. **We expect you to periodically read the WebCT email account or to forward mail from it to an email account you do read (eg. a hotmail account). We recommend you do the same for your main University email account.** In the WebCT Mail window, choose 'Message Settings' and set a forwarding address. Go to <http://www.itassist.usyd.edu.au> and choose 'Students' and 'Your Account' for information on how to **forward** your University email. On the same pages you can also create a more easily remembered **alias** for your University email address (but not your UniKey login).

Where to Get Help

If you are having troubles or difficulties with your Username and Password you can contact one of the Access Labs on campus or contact the ITS Help Desk at <http://itassist.usyd.edu.au/about/contacts/> or ring 9351 6000.

If you are having trouble getting through to your online learning site from home you may need to contact your own Internet Service Provider or the ITS Help Desk.

If you are in a WebCT session and you encounter problems, the WebCT Help button at the top of each page will give you simple answers to most straightforward problems. For answers to some of the more common problems see also: <http://www.usyd.edu.au/webct/student>. For further WebCT assistance, each Physics WebCT page has a link to the WebCT Helpdesk at the bottom of the page or you can email direct to the webct.helpdesk@usyd.edu.au.

Help in using *MasteringPhysics* can be obtained from the on-line help provided by the system. In addition, the booklet that was provided along with the Student Access Kit may also be found in pdf format at

http://www.physics.usyd.edu.au/ugrad/MP_intro.pdf, and an FAQ list is at http://www.physics.usyd.edu.au/ugrad/MP_faq.pdf. Other questions can be posted on the *MasteringPhysics* discussion group on the WebCT pages for this unit.

If you have queries about the subject matter within the Unit or Module you should talk to the lecturer(s) involved, talk to a Tutor in a tutorial or laboratory session, or contact the Physics Student Office (Rm 202 in the Physics building, phone 9351 3037).

We hope you find the resources presented useful and we welcome your comments in helping to improve them.