

## Chapter 18

# Preparation and Presentation of Biology Laboratory Class Materials Through WebCT<sup>®</sup>

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## Introduction

WebCT<sup>®</sup> is course software that makes it relatively easy for you, as the instructor, to create or present secure course materials on the web. You can create entire on-line courses or simply publish materials that supplement existing courses. WebCT<sup>®</sup> requires minimal technical expertise on the part of the instructor and on the part of the student. It is entirely web-based. There is no software to install (other than a web browser such as Netscape<sup>®</sup> or Internet Explorer<sup>®</sup>) on the computers used by the students or instructors. You may access your WebCT<sup>®</sup> course from any computer connected to the web.

WebCT<sup>®</sup> provides an interface or set of controls that allows the instructor (and only the instructor) to design the course and the course presentation. The interface allows you to set color schemes, page layout, etc. The interface also allows you to place your teaching materials on the web. Among other things, you may use text, animations, GIFs, jpegs, and PDFs. You may create your materials outside WebCT<sup>®</sup> and import them into WebCT<sup>®</sup>, through the interface, or you may create your materials within WebCT<sup>®</sup>, using nearly intuitive tools. You may organize the

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files to suit your needs. When you are ready, you give your students access to your course materials. They will never see the interface controls.

WebCT<sup>®</sup> provides a set of educational tools to facilitate learning, communication and collaboration. Students see only those tools and materials the instructor wishes to make available. You may choose to make available any or all of the tools. In addition, WebCT<sup>®</sup> enables the instructor to present on-line quizzes, track student study habits, and manage student grades. You need only use those functions and tools you require. A WebCT<sup>®</sup> course can be as simple or as comprehensive as you choose to make it.

### **Demonstration of materials creation**

#### **PDF (Portable Document Format)**

When instructors create files for others to read, they sometimes run into problems. Instructor and student computer platforms (Mac vs. PC) might not be compatible. Software packages (Word<sup>®</sup> vs. WordPerfect<sup>®</sup>) might not be compatible. Software package versions (5.1 vs. 2000) might not be compatible. There is a package from Adobe called Acrobat Reader<sup>®</sup>. Acrobat Reader<sup>®</sup> **reads** PDF (portable document format) files. It can be installed on PCs, Macs, and UNIX machines. It can be downloaded, over the web, from [www.adobe.com](http://www.adobe.com) and it is free. You may create your document on your platform, in your favorite software package (whatever the version). If you can print it to a laser printer, you can PDF it using Acrobat Distiller<sup>®</sup>. When your student uses the free Acrobat Reader<sup>®</sup> to view the PDF, he or she is going to see exactly what you saw on your computer screen when you created the original file.

Create your syllabus, manual, handout, etc. in your favorite software package. If you want to place these things on your webpage, you don't need to re-work them. Just print them to file (as opposed to printing them to the printer). That will give you a postscript version of the file. Now, drag the postscript file onto the Acrobat Distiller<sup>®</sup> icon (Mac) or open Acrobat Distiller<sup>®</sup> and Select File/Open (PC). When Distiller<sup>®</sup> opens a postscript file, it automatically creates a new file and converts it to a PDF. The PDF file will look exactly like the original printed syllabus, manual, etc. would look. Other types of readers and distillers may be found at [www.pdfzone.com/products/software/](http://www.pdfzone.com/products/software/)

#### **Graphics**

Don't place unnecessary graphics in your web page. They slow things up considerably and your users won't thank you for it. Use your GIFs and jpegs where they contribute to the information you're presenting. You might want to use animation, for example, to demonstrate a procedure or to illustrate a process.

#### **GIF and jpeg**

There are two standard image formats acceptable to the World Wide Web: GIF and jpeg (jpg). You will typically use GIF format when working with a line drawing or with shapes and

simple graphics. You will use jpeg (or jpg) when working with more complex graphics, such as photographs. There are hundreds of ways to create GIF and jpeg files. For instance, you may create a graphic file in a package such as Adobe's Photoshop<sup>®</sup> and save it in the jpeg format or index the colors and then save it in the GIF format. You may take a screen snapshot and convert your clipboard image to a GIF or jpeg format by using the free Clip2GIF<sup>®</sup> package (available free at <http://agnews.tamu.edu/iabc/sharewar.html>). You may create a drawing in Microsoft Word<sup>®</sup>, group the objects in your drawing, click to select the grouped image, and click on the "insert a picture" button. Then "save as html", which will automatically turn your drawing into a GIF. There are freeware packages available for both PCs and Macs at <http://cyberstop.hypermart.net/gtools.html> (primarily for the PC) and at <http://agnews.tamu.edu/iabc/sharewar.html> (Mac and PC).

You may present a slide show in lab and wish to make it available to your students on your web course. If you've created the slide show in PowerPoint<sup>®</sup>, you can "Save as html" and place the resulting graphics on the web course just as you would any other graphic.

### **89a and Animation**

If you've ever seen a round graphic sitting on a white box on a blue web page, you've seen a standard GIF. That white box is very likely the background color of the graphic. If you've ever seen a round graphic sitting on a blue web page and not seen the white box, you've seen an 89a (GIF 89a). The 89a makes the background color transparent (so the blue of the webpage behind the graphic shows instead of the white box). To create an 89a, you could use Photoshop<sup>®</sup> to create your graphic, index the colors, and File/Export as an 89a. You could use Clip2GIF<sup>®</sup> to open an image and convert it to an 89a or take a snapshot and use Clip2GIF<sup>®</sup> to convert the clipboard to an 89a. When you look at the free software listed on the websites given above, check for the ability to save, export, or convert to 89a or for an option that allows you to adjust transparency.

Animations can be extremely easy to create, once you have the still or static graphics available to you. You might use GIF Builder<sup>®</sup> (freeware for the Mac) or Microsoft GIF Animator<sup>®</sup> (freeware for the PC) with your stills. Think of these animations as pads of paper. As you flip through the pad, the figure on the pages seems to be moving. That's basically what you're seeing when you look at the animation. You use your stills (each just a little different from the others), place them in the proper order to indicate movement of some figure on the stills, and tell the animation how fast to 'flip through the cards'. You can run your animation on the web as an animated GIF (no additional plug-ins necessary), as a quicktime movie (quicktime plug-in will be needed by your students, but is browser-installed on current version browsers), or as other types of files which require special plug-ins for viewing from the web. If you want to work a little harder and have an extremely large number of options, you might want to use Adobe's LiveMotion<sup>®</sup> with your graphics to create a timeline objects-animation. There's a steeper learning curve, but the results can be rewarding.

## HTML file

When you look at a web page and see beautifully formatted text and lovely background color and graphics, what you're really seeing is the web browser's interpretation of html code. The code is instructions to the web browser. When the browser reads, "<BLOCKQUOTE>tomorrow is a new day</BLOCKQUOTE>," the browser is going to display the line, "tomorrow is a new day". But the line is going to be indented, because that's what <BLOCKQUOTE> means to the browser. HTML code is nothing but text-only or ASCII. There are many ways to create html code, but, essentially, they can be divided into four categories:

- 1) Hardcode the html. Html code can be created in any text-editing or browser composer package. If you go into Word<sup>®</sup> or WordPerfect<sup>®</sup> and type the correct code, then save it as ASCII or Text-only, it can be used on the World Wide Web. Typing the code from scratch is called hardcoding and, while it isn't as hard as it might sound, there are easier ways to code a web page.
- 2) Use a WYSIWYG (what you see is what you get) web or html editor, such as Microsoft's FrontPage<sup>®</sup> or Adobe's GoLive<sup>®</sup>. You drag your graphics to the desired location on the page. You place your text where you want it (in boxes so you can alter the margins of the specific blocks of text. You use the tools provided on those WYSIWYG packages to create links. The learning curve tends to be a bit steep for some of these packages and if the page doesn't end up looking the way you want it to look, it can be difficult for you to change the code that causes the problem.
- 3) You might take a hybrid of the first two categories. For example, you might use your Microsoft Word<sup>®</sup> 97, 98, or 2000. Create your page as you normally would in Word<sup>®</sup>, than save as html. The resulting file or files can be loaded onto a server and you have a webpage or pages. You might use PageSpinner<sup>®</sup> to type your text. Highlight a string of text:

tomorrow is a new day

Then click on the button or command that will automatically place the blockquote tags where they belong on either end of your string of text.  
<BLOCKQUOTE>tomorrow is a new day</BLOCKQUOTE>

The advantages of using the hybrid become obvious fairly quickly. You don't have to remember as much code because there are buttons and menus to help you. You are exposed automatically to some code which at least allows you to become familiar with html code. That familiarity will stand you in good stead when you find that you need to alter a webpage or create a paragraph's worth of code in WebCT<sup>®</sup>.

- 4) You might use the browsers, themselves, to create your html code. In Netscape Communicator<sup>®</sup>, for example, you can enter Composer<sup>®</sup> and type your text, format it,

insert your images or graphics, and set your links. You don't even need an additional software package to create the html code. Unless you specifically choose to view the source (html) code, however, you will not be exposed to it. Again, a familiarity with html code can be useful.

### **ASCII (text-only) data file**

You will need to allow your students access to your course. The safest and most reliable way to do so is to create a student database. You can create, in Word<sup>®</sup>, for example, a table that contains the student's first name, last name, ID, logon, and password – five cells per student record; each row in the table, a different student. Make certain the first row contains column headings, i.e., firstname, lastname, id, logon, password. When you've finished entering the data, you'll want to convert the table to text, separating the cells with commas or tabs. Make certain there are no spaces, hyphens, or non-alphanumeric characters in the file. Save the files as text-only or ASCII.

You might go into SimpleText<sup>®</sup> and just type:

```
firstname,lastname,id,logon,password  
John,Doe,393939393,jdoe,whatever  
Tom,Smith,292929292,tsmith,whenever
```

or five cells per row and one row per student with a row of column heading labels at the beginning. Save the file. Files saved in SimpleText<sup>®</sup> are text-only files.

## **Functions and Tools of WebCT<sup>®</sup> (description and hands-on)**

### **Content-Relevant Help**

Perhaps the most useful feature of WebCT<sup>®</sup> is the director. You'll notice while you're working that on most windows you'll see this icon:



If you get lost or confused while working on WebCT<sup>®</sup>, stop what you're doing and look for the director icon on the screen. If content-relevant help is available, the director icon will show up at the bottom of the WebCT<sup>®</sup> window you're currently working in. Click on the icon. The people at WebCT<sup>®</sup> have been very good about explaining, step-by-step, how to accomplish tasks and use functions successfully.

### **File Manager**

The file manager allows you to move files into, around, and out of WebCT<sup>®</sup>. If you want to move a file from your office computer to the WebCT<sup>®</sup> server so you can use it in your web

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course, you use the File Manager. If you've created a file in WebCT® or altered a file while in WebCT® and you want to place a copy on your office computer, you use the File Manager. If you want to edit an html file that's used in your web course or create a file that will be used in your web course, you can do these things in the File Manager.

To copy a file from your computer to the WebCT® server so it can be used in your web course:

Go to your homepage.

Click on the File Manager button.

Click on the Upload button.

Click on the Browse button.

In the window that appears, locate the file you want to move and click twice on it.

Click on the Continue button at the bottom of the screen. WebCT® should tell you that the upload was successful.

Click on the Continue button.

Your file is now ready for use in your WebCT® course.

If you want to copy a file from the WebCT® server to your office computer:

Click on the File Manager button.

Click on the checkbox to the left of the file you want to copy.

Click on the Download button.

Tell WebCT® where to put the file on your office computer.

If you want to edit a file that's stored in the File Manager and being used by your web course:

Go to File Manager.

Click on the checkbox to the left of the file you want to edit.

Click on the Edit button.

Make your changes on the right side of the screen when the file opens. This is one of those times you need to hard code html. Remember, you can create the html code elsewhere and copy/paste it into here.

Click on the Save button.

## Customize

Each web page your students see can and should be customized by you. Once you've logged into your WebCT® course, click on the Course Settings button. Selecting your web page colors, icon styles, and counters here will allow them to show up on most WebCT® web pages you create in your course.

Click on the Color button. You'll need to select your background, text, link, and visited link colors. WebCT® will offer you 4 standard color sets. If you choose to use one of them, just click on the number of the set you wish to use. At the bottom of the colors table there is a row of colors marked Custom. If you wish to create your own customized color set, click on the Custom/Bg cell. A color palette will appear. Click on your choice of background color and

click on the Update button. Click on the Custom/Text cell to select your text color, the Custom/Link cell to select color of clickable links in your web pages, and the Custom/Visited cell to select the color of those links which have already been used or visited. When you've finished selecting your web colors, click on the Counter button.

Configure allows you to choose a counter style. When you've chosen the style you prefer to see on your web pages, click the Update button. Choose the location of your counter – the top or bottom of your web pages or no counter at all and click on the Update button. If you want to create or remove a background image, click on the Bg. Image button. When you've completed your selection, click on the Back button to return to your homepage.

The best way to become accustomed to working with WebCT<sup>®</sup> customizing is to customize your home page. Click on the Customize Page button. You have already chosen your global web course settings. Unless you want to override them for the homepage, you don't need to worry about the colors, counters, or background image. You may, however, want to revise the banner and you will want to revise the header and the footer. To revise the banner, you click on the Banner button, make your selection, and click on the Update button.

Header and Footer might be considered misnomers. We are accustomed to seeing a header or footer at the top or bottom of a manuscript or a manual. Each is generally about 2-3 lines containing title and page number. That's not true in WebCT<sup>®</sup>. Here, the header and footer are the bulk of the web page. The header and footer are where you place your text and your graphics.

Click on Header. You'll see a small radio button on the left. Click on it. Now you can edit or delete your header. If you delete your header, you will then need to add a header (Text/Image). When editing or adding a header or footer, you see this page:

**Layout**  
 Eg. Colour:  ← Leave this set at none unless you want to override your course settings.

**Text Heading**  
 Alignment:  Left  Center  
 Style:  **Bold**  *Italic*  Underline ← Click here to select Default. That will make the Text Heading the color you chose for your course settings.  
 Colour:  Size:   
 Text:

**Text**  
 Alignment:  Left  Center  
 Style:  **Bold**  *Italic*  Underline ← Click here to select Default. That will make the Text the color you chose for your course settings.  
 Colour:  Size:   
 Text: 

```
<center><h1>My course</h1><h3>Whatever I want!<p>
And no one can tell me any different!</h3></center>
```

This is where you want to place the text students will see. Typically, we place html code here. This is one of those times you need to hard code html. Remember, you can create the html code elsewhere and copy/paste it into here. Even if you don't plan to create entire html pages, you should be familiar with some basic html code.

**Image**  
 Alignment:  Left of Text  Right of Text  Above Text  Below Text  
 Filename: Click on the browse button to locate the graphic file you want to use on your homepage. You must already have uploaded the graphic file in order to use it.

**Caption**  
 Alignment:  Left  Center  
 Style:  **Bold**  *Italic*  Underline  
 Colour:  Size:   
 Caption:

Make your changes and click on the Update button. Then click on the Back buttons until you have returned to your homepage. You'll know you've reached the homepage when you see the Update Student View button at the bottom of the screen. The homepage is the only place in WebCT® this button appears.

Now click on the Organize Icons button.

These are the icons that appear on your homepage. Each of these icons is a link to another page either within your WebCT<sup>®</sup> course or outside of it. Some of these icons you will want to keep and use. Some of them you'll want to get rid of. Rather than delete them, I suggest you hide them. That way, they will remain easily available to you, as instructor/designer, in case you should change your mind and want them later. Anything that is hidden is unavailable to the students in your course. If you see something you know you want to hide, click on the radio button to the left of the icon and then click on the Hide button. If you're not sure that you want to hide it (you may want to use it), click on the icon, itself. You'll be taken to the related webpage. If you click on the calendar icon, you'll be taken to the calendar; click on the Online Quizzes icon and you'll be taken to the quiz creator page.

If you want to add an icon or a link to the homepage, click on the Organize Icons button and then on the Add button. You'll be given the option of creating a link to one of the following:

### **A Path**

A Path is a hierarchical outline. Think of it as a clickable study guide. Those html files you create can be linked to a path. When the student clicks on the homepage icon for that path, he or she sees the html file you created. You can and should place multiple files on a single path page. That's how you get a clickable outline or study guide.

### **A URL**

The URL icon or link allows you to type in a url and allow your students to link to that website from your website.

### **A WebCT<sup>®</sup> Tool**

WebCT<sup>®</sup> offers many tools for student use and instructor use. As you get to know them, you may want to expand the capabilities of your web course. Then you can create a WebCT<sup>®</sup> Tool link.

### **A Tool Page**

Your homepage is an example of a tool page. It contains link icons to other tools, pages, paths, and places.

### **A Single Page**

A single page is exactly that. A Path icon links to several pages in one outline. A single page icon links to one html page. This is another of those places you would use the html files you create.

## Creating Paths

Go to your WebCT<sup>®</sup> homepage.

Click on the Organize Icons button.

Click on the Add button.

Click on the Path button.

Give the path a title. The title will show up on your home page (along with the icon if you select one) as a link to the Path.

When you see the link and the icon appear, click on the icon to go to the Path Editor.

Click on the Add File button at the bottom of the screen.

On the right side of the screen, you will see the .html files you have created and uploaded through the file manager.

If you don't see the file you're looking for, click on the Browse... button. That will take you to the File Manager. You can locate the file you need, click on the checkbox to the left of it, and click on the Pick button. That will bring you back into the Path Editor and the file will appear on the right side of the screen.

Highlight the file you want to use and click on the Add File button at the right side of the screen. You will see the title of the file appear on the left side of the screen. If you click on that title, you'll be taken to the html page and will see it as your students would see it.

If the title is "untitled" you forgot to place a title in the html page when it was created. You'll need to correct the html page. The fastest, most reliable way to correct the "untitled" title in the Path Editor is to delete the entry, correct the html file, and re-create the entry in the Path Editor.

You can continue adding files to the path as you wish. You can reorganize the path (or outline), indenting topics and reordering titles, by clicking on the Reorganize button at the bottom of the Path Editor. You can create a new page (to contain student tools or hard-coded html) by clicking on the Create File button. This is a good way to link to your pdf files.

Click on the Create File button.

Give your new file a name that ends with .html and give it a title the students will see in the outline. When it appears on the outline at the left, click on the title.

Click on the Page Text button. Make certain the following code is entered:

```
<TITLE>Place your title here</TITLE>
```

```
<A HREF="Place your pdf's file name here. It should end in .pdf">Place a description of your pdf here. Your students will click on the description to access the pdf file</A>
```

For example:

```
<TITLE>PDFs on the web</TITLE>
```

```
<A HREF="41pdfweb.pdf">Students, click here to see the file that explains how to put a pdf onto the world wide web.</A>
```

The students will see this on the Path:

2. [Genetics & Molecular Biology](#)
3. [PDFs on the web](#)

If they click on the “PDFs on the web” title, they will see this:

[Students, click here to see the file that explains how to put a pdf onto the world wide web.](#)

If they click on it, the 41pdfweb.pdf file (stored in the file manager) will open and they can view and print it.

### Creating a Searchable/linkable glossary

To create your glossary in your favorite word-processing application, follow this example:

-----  
:adaptation

A process of genetic change of a population, owing to natural selection, whereby the average state of a character becomes improved with reference to a specific function, or whereby a population is thought to have become better suited to some feature of its environment. Also, an adaptation of a feature that has become prevalent in a population because of a selective advantage owing to its provision of an improvement in some function. A complex concept; see Chapter 12.

:adaptive peak

That allele frequency, or combination of allele frequencies at two or more loci, at which the mean fitness of a population has a (local) maximum. Also, the mean phenotype (for one or more characters) that maximizes mean fitness.

:adaptive radiation

Evolutionary divergence of members of a single phylogenetic line into a variety of different adaptive forms; usually the taxa differ in the use of resources or habitats, and have diverged over a relatively short interval of geologic time. The term evolutionary radiation describes a pattern of rapid diversification without assuming that the differences are adaptive.

-----  
Follow the above format (where, for example, "adaptation" is the term and "A process...see Chapter 12." is the definition) to create your initial glossary file in your favorite wordprocessor. Save the document as a text-only or ASCII file.

Go into WebCT's<sup>®</sup> file manager and upload the glossary file you've created.

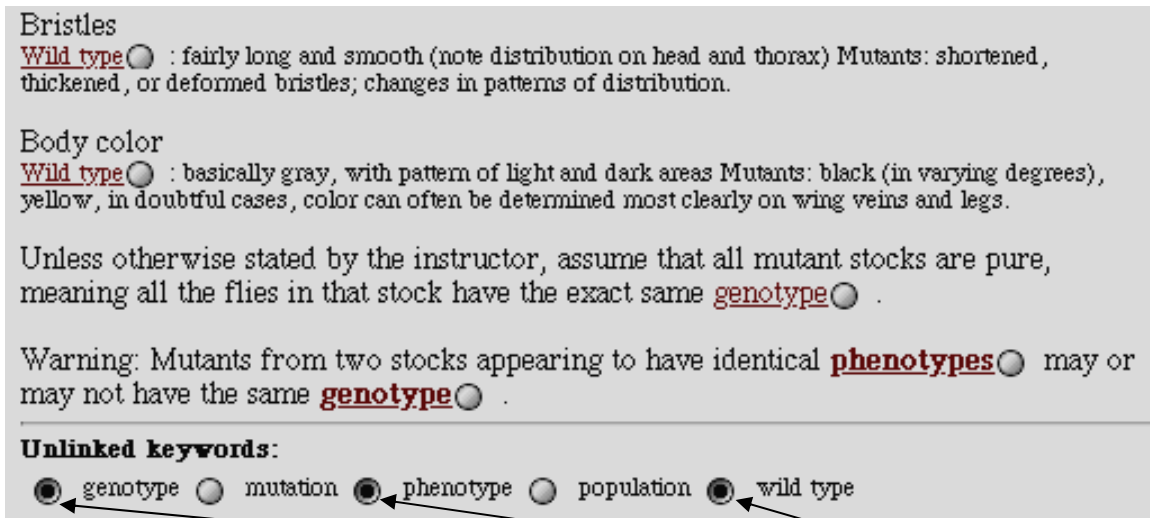
Once you've done that, go into Course Tools and Other useful Links (pre-existing icon), then to Search the Course Glossary (pre-existing icon).

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Once there, click on update from file and click on Browse. You should see a list of filenames appear. On the list should be the glossary you just uploaded. Click inside the little circle to the left of the glossary's file name. Click on Pick. Click on Continue. Click, again, on Continue when the new Continue comes up.

The glossary is now loaded onto the WebCT<sup>®</sup> server. You still need to tell WebCT<sup>®</sup> that the glossary is a glossary and not to be used as something else. Go to the homepage. Click on the icon for the course tools and other useful links. When you get to the tool page, click on the glossary icon. Click on the Update from File button. Click on the Browse button. Locate your uploaded glossary file in the list that appears. Click on the radio button to the left of the filename. Click on the Pick button. Click on the Continue button. A word list will appear. At the bottom of that list is another Continue button. Click on it. Your glossary is now installed and is usable for your course.

Go to one of your linked html pages. At the bottom of the page you'll see the Glossary icon. Click on it. Click on the Edit Links button. You may see radio buttons and underlines all over your html page.



Bristles  
Wild type  : fairly long and smooth (note distribution on head and thorax) Mutants: shortened, thickened, or deformed bristles; changes in patterns of distribution.

Body color  
Wild type  : basically gray, with pattern of light and dark areas Mutants: black (in varying degrees), yellow, in doubtful cases, color can often be determined most clearly on wing veins and legs.

Unless otherwise stated by the instructor, assume that all mutant stocks are pure, meaning all the flies in that stock have the exact same genotype .

Warning: Mutants from two stocks appearing to have identical phenotypes  may or may not have the same genotype .

---

**Unlinked keywords:**  
 genotype  mutation  phenotype  population  wild type

This is a good thing. WebCT<sup>®</sup> is telling you that your glossary contains words and definitions your students may want to look at. You can link the words on the html page to the words in the glossary.

Body color

Wild type: basically gray, with pattern of light and dark areas Mutants: black (in varying degrees), yellow, in doubtful cases, color can often be determined most clearly on wing veins and legs.

Unless otherwise stated by the instructor, assume that all mutant stocks are pure, meaning all the flies in that stock have the exact same genotype.

Warning: Mutants from two stocks appearing to have identical phenotypes may or may not have the same genotype.

When the students click on the word in the html page, the glossary opens and provides a definition.

**Glossary Definition: wild type**

The allele, genotype, or phenotype that is most prevalent (if there is one) in wild populations; with reference to the wild-type allele, other alleles are often termed mutations.

### Self-testing for Students

You have created an html page. You have created a Path to that html page. If you follow that path to the html page, you'll see buttons at the bottom of the screen. Click on the Questions button.

Click on the New Question button.

Type in a question that relates to the material covered in the html page.

Click on the Update button located immediately under the question.

Notice that the radio button beside your question is selected. Click on the New Answer button.

Type in a possible answer and a reason the answer is right or wrong. You might think of this as directed study. Using suitable answers and reasons for those answers, you can direct the student to the right answer.

Click on the Update button located immediately under the reason.

Click on the New Answer button, again. Provide another answer and another reason the answer is right or wrong or partially right or wrong.

Click on the Update button located immediately under the reason.

You will see radio buttons at the right side of the answers. Click on the one that is beside the correct answer to the question.

Click on the Update button located at the bottom of the screen.

Click on the Self-test icon at the top of the screen. Click on one of the answers to the question.

This is how you test the self-test you've created for your students. To edit the questions or answers, click on the Back button, then on the Questions button.

**NOTE:** You may find that you have altered questions or answers and the changes are not reflected when you click on the Self-test icon. This is not unusual. Finish making your changes. Go to your homepage. Click on the Update Student View button. Accept

## Class Materials on WebCT

anything WebCT<sup>®</sup> tells you. Quit your browser. Re-start your browser, go to the Path, the link to the html page, and the Self-test icon. Your changes should appear.

### Student Database

You have already created your student list as shown in the **ASCII (text-only) file** section earlier in this document. Now, you'll go to your WebCT<sup>®</sup> homepage. Click on the File Manager button. Click on the Upload button. You'll see a window that contains your office computer's drives, folders, and files. Locate the Text-only (ASCII) file you created and upload it to the WebCT<sup>®</sup> server.

Once you've uploaded the file to WebCT<sup>®</sup>:

Go to your homepage.

Click on the Course Management button.

Click on the Student Management button.

Click on the Students button.

Click on the Update from File button.

Click on the Browse button.

Click on the circle beside the file you just created and uploaded.

Click on Pick

Click on Continue

You will be offered choices regarding the columns you have uploaded.

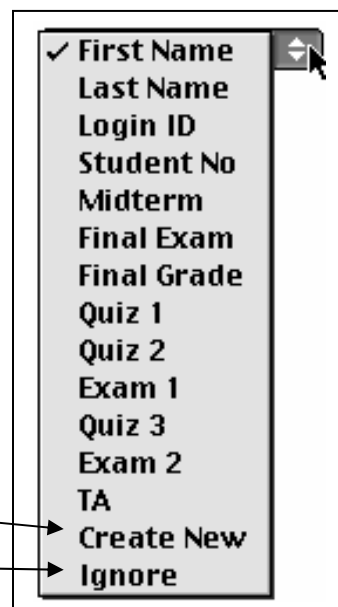
For example:

If your first column was labeled "fname", you will be told that it doesn't currently exist in the WebCT<sup>®</sup> student database. You may choose to place the column's data into an existing field or create a new field called "fname" or ignore all the data in the field you just uploaded.

If you choose to place the data into an existing field, click on the list of available fields and highlight the field you wish to fill with your new uploaded data.

If you wish to create a new field called "fname", click on Create New

If you wish to forget all about adding the new data you uploaded, click on Ignore.



Click on Continue. Work this way until all of your fields and data have been added to your student database. Bear in mind that you are always free to add or delete columns one by one at a later date.

**NOTE: at some point you are going to see a page that suggests you confirm the information is correct. On that page, you will need to select which field is to be used as the initial password.**

## Quizzes/Surveys and Self-testing

### Quizzes/Surveys

Quiz and survey questions may be of the following types: multiple choice (MC), matching (M), short answer (S), calculated (C), and paragraph. The two most useful seem to be MC and M. Short answer requires exact matches to stated correct answers and Calculated-answer questions require more settings and specifications than are required when we quiz the old-fashioned way. Paragraph answers are somewhat unique. They are not machine graded. The best way to create a paragraph question for a quiz is from inside WebCT®.

There are two ways you can create quizzes in WebCT®. You can use a text-only file to contain your questions and upload that file to WebCT® or you can enter your WebCT® web course and create the quizzes and the questions there.

### Text-only questions for quizzes

You can upload a text-only file that contains tags, questions, answers, titles, categories, points, etc. The information in the text-only file must be placed in a particular order and that order is governed by the type of question being asked (MC) or (M).

Type of question

How many answers can the student select?

Title of the question when seen in the WebCT® listing

Category of questions to which this question belongs

The question

Answer # 1

How many points is answer #1 worth? (If worth no points, leave blank)

Answer # 2

How many points is answer #2 worth? (If worth no points, leave blank)

Answer # 3

How many points is answer #3 worth? (If worth no points, leave blank)

Answer # 4

How many points is answer #4 worth? (If worth no points, leave blank)

For what reason is Answer #1 correct or incorrect? (If no reason, leave blank)

For what reason is Answer #2 correct or incorrect? (If no reason, leave blank)

For what reason is Answer #3 correct or incorrect? (If no reason, leave blank)

For what reason is Answer #4 correct or incorrect? (If no reason, leave blank)

## Class Materials on WebCT

Each piece of information must be preceded by the tag that identifies that piece of information to WebCT®. When you've finished writing your multiple-choice question, it should look something like this:

```
:TYPE:MC:1
:TITLE:Instructor
:CAT:Instructor
:QUESTION
The instructor/lecturer for Biology 212 is
:ANSWER1:0:H
Lisa Jenkins
:ANSWER2:100:H
Zenephia E. Evans
:ANSWER3:0:H
Ming Wu Zhang
:ANSWER4:0:H
Jon Folk
:REASON1
Lisa is the lab coordinator.
:REASON2
You are correct. Dr. Evans is teaching this course.
:REASON3
:REASON4
Jon Folk is a TA for the course – not an instructor.
```

When you've finished writing your matching question, it should look something like this:

```
:TYPE:M:short:short:E
:CAT:people
:QUESTION
Match the following first names with the correct last names:
:L1
Louis
:R1
Campbell
:L2
Bob
:R2
Smith
:L3
Dennis
:R3
Johnson
:L4
```

David  
:R4  
Jones

The second question (of either type) should begin on the line immediately below the last line of question 1. In other words, you may have both MC and M questions in the same text-only file.

Once you've created your text-only file, go onto the web and into your WebCT® course.

Click on the Online Quizzes and Surveys icon.

Click on the Add Quiz button.

Give your new quiz a title.

When the screen appears that lists that title, click on the underlined title.

You should see, "No questions have been added to quiz yet."

If you have one question to put into the quiz, click on the Add Question button at the bottom of the page.

If you have many questions to put into the quiz, click on the Add Question Set button.

Click on the Listing button.

Click on the Upload button.

Browse to find the file quiz file you created in Word and then uploaded to the WebCT® server.

When you browse here, WebCT® is searching its own folders for a file.

When you've located the file, click on the dot to the left of the filename.

Click on the Pick button at the top of the frame.

Click on the Continue button.

Click on the Continue button.

Click on the Back button.

Click on the category that you've just uploaded.

- Click on the checkbox to the left of the questions you want to add.
- Click on the Pick button.
  
- If you added a single question, you may now set the point value of that question.
  
- If you added a question set, you may now select how many of the questions are asked. If you, for example, had 10 questions in the set and only wanted each student to see 5 randomly-chosen questions (each worth 1 point). You would place a 1 in the Points box and would use the drop-down list in the Select column to highlight 5.
  
- Click on the Update Total button.
- Now you are ready to set some limits on the quiz.
- Click on the Settings button.

**Notes to ABLE:**

- 1) On the settings screen, you will note that you have the option of setting dates and times to allow students access to the quiz. I do not recommend your using this option. It has been unreliable. I suggest you click on the Allow Access Now button when you want to make the quiz available and click on the Deny Access Now button when you do not want the students to have access any longer.
  - 2) You may set the student's quiz-taking time limit by placing a number (10 minutes per quiz would be 10) in the duration box. WebCT<sup>®</sup> will keep track of how long each student spends taking the quiz. WebCT<sup>®</sup> will not stop the quiz once the time limit is reached.
- When you've finished with the settings, click on the Update button.
  - Click on the Back button.
  - Click on the Back Home button.

**Creating quiz questions from inside WebCT<sup>®</sup>**

Click on the Online Quizzes and Surveys icon.

Click on the Questions icon.

The circled blanks shown on the following pages must be filled. Click on the Save button when you've completed your quiz question.

Return to the home page.

Click on the Online Quizzes and Surveys icon.

Click on the Add Quiz button.

Give your new quiz a title.

When the screen appears that lists that title, click on the underlined title.

You should see, "No questions have been added to quiz yet."

If you have one question to put into the quiz, click on the Add Question button at the bottom of the page.

If you have many questions to put into the quiz, click on the Add Question Set button.

Click on All Categories in the lefthand column.

Follow the instructions bulleted in the section above.

Multiple choice question

Save Save As New More Answers Cancel

Category: people

Title: teaches 242

Question:  
Who teaches Biology 242?

Format:  HTML  Text

Image:  Browse...

Settings:

Allow Students to Choose:  One Answer  Multiple Answers

Allow Negative Score:  Yes  No

Answer Layout:  Vertical  Horizontal

Answers:

Answer 1:  
Robert Smith

Format:  HTML  Text

Value(%): 100

Feedback 1:

Format:  HTML  Text

Answer 2:  
Louis Stevenson

Format:  HTML  Text

Value(%): 100

Feedback 2:

Format:  HTML  Text

Answer 3:  
Susan Karcher

Format:  HTML  Text

Value(%): 100

Session:

Save Save As New More Answers Cancel

Matching question

**Category:** people

**Title:** naming

**Question:**  
Match the following first names with the correct last names:

**Format:**  HTML  Text

**Image:**

**Settings:**  
**Marking Scheme:**  Equally Weighted  All or Nothing  Right Less Wrong  
**Preview Columns:**  Yes  No

Louis	matches	Stevenson
Robert	matches	Smith
Dennis	matches	Jones
David	matches	Bainbridge

**Feedback:**

**Format:**  HTML  Text

**Session:**

## Grades and Study Habits

You have a student database created and your students are taking quizzes online. They're also taking exams the old-fashioned way. You'd like to keep their grades in WebCT<sup>®</sup> so each student can look at his or her grades. The quiz grades are already being kept. Go to your homepage. Click on the Course Management button. Click on the Student Management button. Click on the Edit Columns button. Click on the Add button to create columns for Exam 1, Exam 2, and Exam 3. Click on the radio button at the top of Exam 1. Click on the Release button. Do the same for the Exam 2 and Exam 3 columns. Now your students should be able to review their grades as quickly as you put the grades in.

If you would like to find out who is spending time on the course site and how that time is being spent, you can go to the homepage and click on Course Management. Click on Student Tracking. Click on the highlighted cell in the student's row. You'll be able to see which pages were visited, how long the student stayed there, and when the student was there.

## Conclusion

The WebCT<sup>®</sup> functions and tools we covered in this workshop are only a small part of those available in WebCT<sup>®</sup>. You may make use of as many or as few WebCT<sup>®</sup> tools as you choose. We dealt with those which are most likely to be difficult for the instructor. Among the many tools not demonstrated during this workshop are: logged and unlogged chat rooms, calendars, course email accounts, group presentation areas, and an electronic bulletin board (threaded discussion). These tools are intuitively easy to use. The version of WebCT<sup>®</sup> used for this workshop was 1.2. Version 3 was released in late summer of 2000. Instructors who can create a course in 1.2 can do so with fewer complications and less confusion when they use 3.0. Version 4.0 is scheduled for release in July 2001.

While Netscape Navigator<sup>®</sup> or Communicator<sup>®</sup> will work with WebCT<sup>®</sup>, you will find greater speed when using Internet Explorer<sup>®</sup> to edit your course. This document and the workshop were created for use with Macs. While you can certainly create and maintain your course site using a PC, the appearance and behavior of WebCT<sup>®</sup> may/will be slightly different.

For additional information about WebCT<sup>®</sup> and about pricing of the WebCT<sup>®</sup> package go to: <http://www.webct.com/>