WEBWORK FOR INSTRUCTORS

1. Webwork overview

Webwork is an online homework management system. It provides an extensive library of problems that can be used to create problem sets for students to solve online. You can also create your own problems. Problems are randomized, so that each student gets a different version. Problems are graded automatically, and grade records are kept for you.

You can get more information about Webwork at http://webwork.maa.org.

2. Resources supporting Math 0120 and 0200

2.1. **Default assignments.** There is a collection of default assignments for each course, labeled Homework_01 – Homework_13, that you can use. In order to use them, you must assign them to your students and set a due date.

2.2. **Problem library.** There are additional "assignments" organized by textbook section. These are not intended to be assigned to students. Rather they are for you to use as resources to create your own homework assignments, should you choose to do so.

3. Using Webwork

3.1. Logging in. The URL of our Webwork server is http://webwork.math. pitt.edu. There you will find a list of courses, including yours. The name of your course will be Mathxxx-yyyyy, where xxxx is the four digit course number and yyyyy is the five digit class number for your lecture. Clicking on the link to your course will bring up a login screen. At the login prompt, enter you usual Pitt username and password, with username in lower case.

3.2. Viewing problem sets. On initial login, you will not see any problem sets, since they have not been assigned to you. You can assign them to yourself as follows.

- (1) Click "Instructor Tools" in the main menu on the left.
- (2) Select the problem sets you want to see¹ from the scrolling list on the right.
- (3) Select yourself from the scrolling list on the left.
- (4) Click "Assign selected users to selected sets."

To see the problem sets you have just assigned to yourself, click "Homework Sets" in the main menu on the left.

Date: September 9, 2013.

¹Initially, you should choose the problem sets named "Homework xx." The other problem sets are not intended to be assigned as homework. They are indexed to sections of the textbook, and can be used by instructors to build their own homework sets.

- 3.3. Assigning homework. There are several steps to assigning homework.
 - (1) Set an open date when the assignment becomes available.
 - (2) Set a due date.
 - (3) Set a date for publication of answers.
 - (4) Make the assignment visible.
 - (5) Assign the assignment to all students in the class.

You do all these things from the "Instructor Tools" page.

- (1) After logging in, click the "Instructor Tools" link from the menu on the left.
- (2) Under the "Sets" heading, select the homework set you want to assign from the scrolling list and click the "Edit one set" button.
- (3) In the "General Information" box, set the open date, due date, and the date answers are to be published to students. Make sure the homework is set to "Visible" and the assignment type is "homework." Click "Save Changes."
- (4) Return to the Instructor Tools page, and select the desired set again. This time, click "View/edit all users," and then "Assign to all users."

3.4. **Roster updates.** Your class rosters will be loaded into your Webwork course for you before the beginning of the term. However, class rosters will change through the drop/add deadline. Your roster will be updated periodically to reflect these changes. At each update, new students will be added to your roster. Students who have dropped your course will remain on your Webwork roster, but they will be flagged as "Dropped."

When new students are added, they will *not* automatically be assigned homework that has been assigned to other students. You will have to do that yourself. A quick way to do that is as follows.

- (1) Click the "Instructor Tools" link from the menu on the left.
- (2) Select the problem set you want to assign from the scrolling list of problem sets, and click "View/edit all users for one set."
- (3) Click "Assign to All Current Users" at the top of the page.

4. Tips

4.1. Seeing what students see. You can create a "fake" student login for your class that you can use to see what the students see. To do this, you must use a username that is *not* a valid Pitt username. Something like "fakestudent" should be safe. Whatever you enter in the student ID field will become your initial password. You can change the password for this account the first time you login as fakestudent.

Caveat: Your Webwork roster will be periodically updated during the drop/add period to keep it in sync with your class enrollment. As part of the update process, students on your Webwork roster who are not enrolled in your course will be flagged as "dropped," which will disable their logins. If your fakestudent login stops working, login as the instructor and use the classlist editor to change the status of fakeuser from "dropped" to "current."

4.2. **Managing email.** Most Webwork pages used by your students will have an "Email instructor" button. This could potentially generate a lot of email that you want to keep separate from your "normal" email.

One way of doing this is to use the subject line, which always begins with [WWfeedback] to filter Webwork generated mail into a separate folder.

Another strategy would be to use a separate email account for your Webwork mail. For example, you could create a gmail account specifically for this purpose. If desired, you could share that account with recitation leaders.

Although not recommended, it is possible to remove the "Email instructor" button. See subsection 5.7 below.

5. How do I ...

5.1. Change the due date of a problem set for all students?

- (1) Click on "Hmwk Sets Editor" in the main menu.
- (2) Click the pencil icon next to the problem set you wish to edit.
- (3) Edit the due date and answer date. The answer date is the date/time when problem solutions will be published, so it should be later than the due date.
- (4) Select "Save changes" and then "Take action".

5.2. Change the due date of a problem set for one student?

- (1) Click "Classlist editor" in the main menu.
- (2) In the row corresponding to the student you wish to update, click the link in the "Assigned sets" column.
- (3) In the row corresponding to the problem set you wish to update, click the checkbox for each date you wish to update, and enter the new dates and times.
- (4) Click the "Save Changes" button.

5.3. Change the weight and/or allowed attempts for a problem? By default, each problem is worth one point, and students are allowed unlimited attempts. To change the weight of a problem or limit the number of attempts allowed, proceed as follows.

- (1) Click "Homework Sets Editor" in the main menu.
- (2) Scroll down to the list of problem sets and find the row corresponding to the problem set containing the problem(s) you want to modify.
- (3) Click the number in the third column (the one with heading "Edit Problems").
- (4) For each problem you want to modify, enter new value(s) for "Weight" and/or "Max attempts."
- (5) Click the "Save Changes" button.

5.4. **Print a problem set?** Login to your course, and click the link to the problem set you want to print. At the top of the page, there will be a link to "Download PDF or TeX Hardcopy for Current Set." Click that link. The page that comes up has lots of options, but you can stick with the defaults. Click the "Generate hardcopy" button at the bottom of the page. Depending on your browser settings, this will either display or download a pdf, which you can print.

5.5. Upgrade the privileges of a TA?. By default, TAs have fewer privileges in your Webwork course than you do as the instructor. For example, TAs cannot assign problem sets or change/set due dates. To upgrade the privileges of a TA, do the following.

- (1) Click "Classlist Editor" in the main menu.
- (2) Click the checkbox next to the record for the TA you want to upgrade.
- (3) Click the radio button next to "Edit selected users."
- (4) Click the "Take Action!" button.
- (5) In the Permission column, select "Professor" from the popup menu.
- (6) Click the radio button next to "Save changes."
- (7) Click the "Take Action!" button.

5.6. Add a student to my class? To add a student, you will need to know his/her name, Pitt user id, and Peoplesoft id (optional).

- (1) Click "Classlist editor" in the main menu.
- (2) Select the radio button next to "Add 1 student".
- (3) Enter the values for first name, last name, student id (optional), login name (must be Pitt user id, in all lower case), and email address (userid@pitt.edu). Other fields can be entered at you discretion.
- (4) (Optional) Select any homework assignments you wish to assign to the newly added student. Warning: Problem sets that were previously assigned to other students will not automatically be assigned to newly added students.
- (5) Click the "Add Students" button at the bottom of the page.

5.7. Remove the "Email instructor" button from Webwork pages?

- (1) In the main menu under "Instructor tools," select "Course configuration."
- (2) Click the "Permissions" link at the top of the page.
- (3) Next to "Can email instructor," select "nobody" from the popup menu.
- (4) Click the "Save changes" button at the bottom of the page.

5.8. Export grades to a spreadsheet?

- (1) Click "Scoring Tools" from the main menu under "Instructor Tools".
- (2) Select the homeworks you wish to export. You can select multiple homework sets by holding down the shift key.
- (3) Uncheck *all* the checkboxes in the right panel.
- (4) Click "Score selected set(s) and save to:". If you wish, you can edit the file name (to the right of the button) first.
- (5) You should see a link to a grade file just under the "Totals" heading, which you can download to your computer.
- (6) Import the csv file into your favorite spreadsheet program.

6. LEARNING MORE ABOUT WEBWORK

If you want to learn more about using Webwork, visit http://webwork.maa.org.