Instructions for Wolfware Webwork Server

There some major differences in setting up the Moodle-Webwork interface in the new system.

I'll start at the very beginning.

1) Get you Moodle page set up ASAP. This will allow the Delta people to create and link a Webwork page to it

The new system needs to create a new Webwork class for each semester, in order to satisfy university record-keeping requirements, e.g., saving grades and student answers. I had written instructions that allowed you to do that manually for the Math Webwrk server. However, if you didn't bother, the records for the class were lost or possibly partially recorded in Moodle. From now on, Webwork classes will be designated by class_section#_semester, e.g., ECE220-001_Fall_2020. You name will not be part of the ID.

2) Request the creation of your new Webwork class using the form referenced by Jeff Webster's email of 7/14/20. The link is
   https://ncsu.service-now.com/sp/?id=sc_cat_item&sys_id=66c313e7c0a8016b008ebe1a8e3d97f5
   and requires you to login. You just need to give them your class and section number and your desire for a new Webwork class. They should have your name from your login.

Once the Webwork class is created, you can login to it and set it up as you wish. Jeff gave instructions on archiving your old Webwork class on the Math server https://webwork.math.ncsu.edu/webwork2. I have repeated and edited this in the Webwork Information for ECE courses https://ecewebwork.wordpress.ncsu.edu/instructions/ under Create and save archive of your class. The easy way to do this is simply archive the whole Webwork file folder for your class. That way you can make it look exactly like your old class.

I have talked to the Delta people who are implementing the change. They have agreed to copy your old class to the new one. However, you need to check this when you first access your new Webwork class. You will need to "import" the problem sets that you want into the new class.

NOTE: Access to Webwork – Differences from previous system

As instructor you will be able to access Webwork directly via the Wolfware server
https://webwork.wolfware.ncsu.edu/webwork2/
However, students, TAs and others that are added to your Webwork Classlist, e.g., me, CANNOT access the Webwork class directly. Those people MUST access Webwork via your Moodle class page. If you wish my assistance with Webwork, you need to include me in your Moodle page as a hidden instructor. Designated TAs in Moodle will also have access.

Assigning Webwork Problem Set in Moodle: This is also different from the previous system. You will no longer use a dropdown menu to choose the problem set you wish to assign. Instead, you will need to copy the URL of the problem set.

Note also that your new Moodle page will likely have the links to the old Webwork problem sets. These will not work within the new system. The link is to the Math server. The link cannot be changed by a simple edit. You need to delete the old assignment and create a new one. The steps for this are described below.

In the following assumes that the Moodle page has been created and the link to the new Webwork class has been completed. IN this example, I'll use ECE421 for the guinea pig. The webwork class on the Wolfware server is ECE_421_001_Fall_2020. Since I'm making the modifications, I access Webwork by clicking on any one of the new problems that is available in the Moodle page or create a new problem.

Create a new link to a Webwork problem set
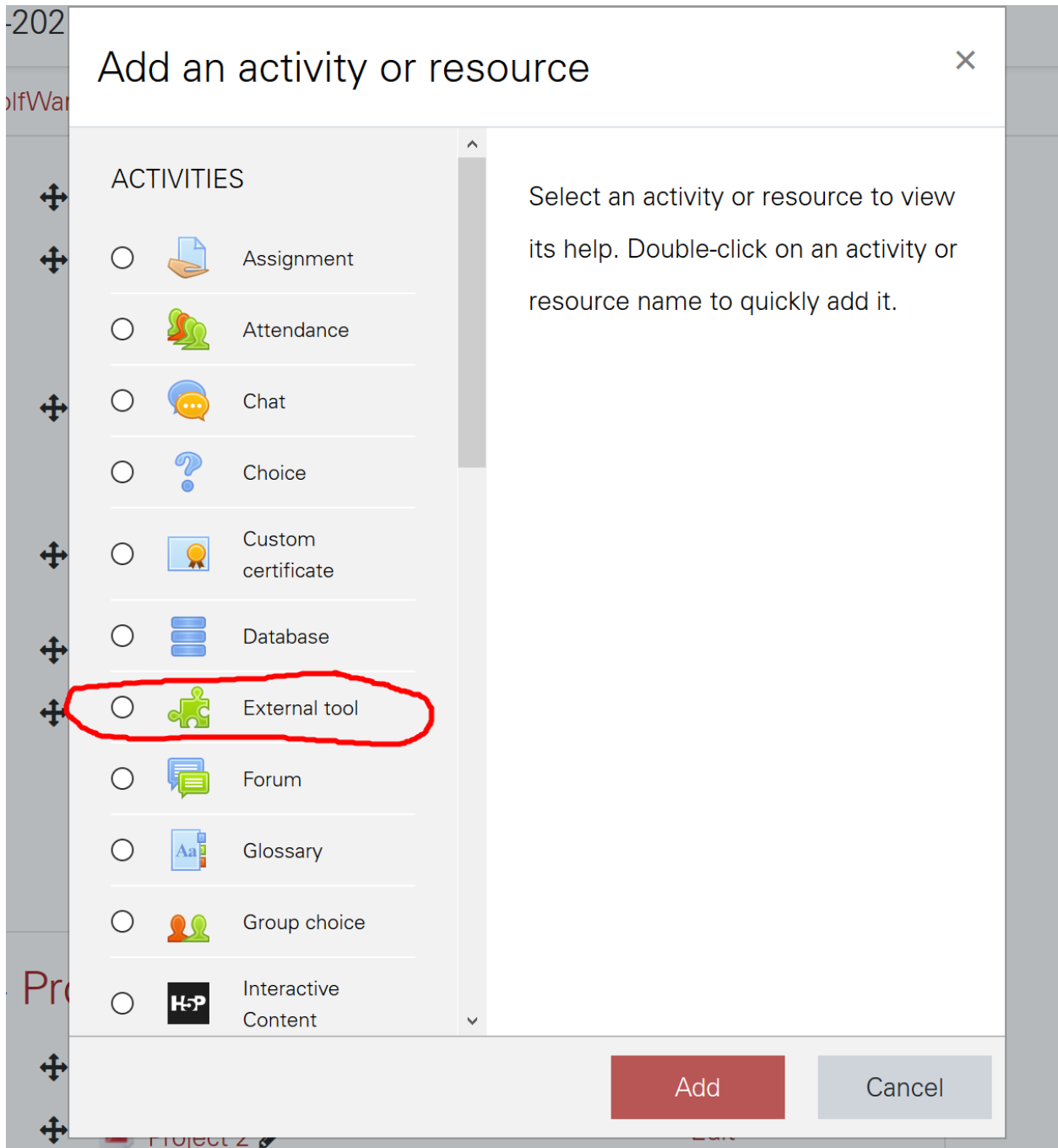
Click the Add an activity or resource link

Select External tool option on the menu, then click Add

The new page is

Adding a new External tool to Homework Assignments

The blanks are the Activity name, e.g., Homework 1, Orientation, your choice

The next selection is Preconfigured tool. Here you can select Webwork or you can use the Automatic based on Tool URL.

The Tool URL from your Webwork website will be identified by the Extrernal Tool module. I'll use it.

The URL of the Webwork problem set requires some work to obtain.

At this point, the External Tool page looks like

🧩 Adding a new External tool to Homework Assignments ❓

▶ Expand all

▼ General

Activity name	❗	New example Webwork Problem
Preconfigured tool	❓	Automatic, based on tool URL ⬍ ➕ ⚙ ✖
		Select content
Tool URL	❓	

Show more...

▶ Privacy

▶ Grade

We go to the Webwork class site to find the URL. If you are the instructor, you have access to this site directly and can find the URL. Since I'm not the instructor, I have to create a dummy problem set that allows me access later. In this case, I use the URL of the Wolfware server class, https://webwork.wolfware.ncsu.edu/webwork2/ECE_421_001_Fall_2020.

🧩 Adding a new External tool to Homework Assignments ❓

▶ Expand all

▼ General

Activity name	❗	New example Webwork Problem
Preconfigured tool	❓	Automatic, based on tool URL ⬍ ➕ ⚙ ✖
		Select content
Tool URL	❓	https://webwork.wolfware.ncsu.edu/webwork2/ECE_421_001_Fall_2020
		✔Using tool configuration: WeBWorK

Show more...

▶ Privacy

Click Save and return to course

This has adding the link to the new Webwork class, but no real problem yet.

⊹ 📕 Practice Problems in Chapters   Edit ▾
7,8, 10 ✏️
     Hidden from students

⊹ 📕 Practice problems homework   Edit ▾
set 10 ✏️

⊹ 🌟 Webwork homework 10 ✏️   Edit ▾

⊹ 📕 Solutions to Homework 10   Edit ▾
✏️
     Hidden from students

⊹ 🌟 New example Webwork   Edit ▾
Problem ✏️

➕ Add an activity or resource

Next click on the new problem link. This opens the class Homework Sets link within the Moodle page. This is the same page that was used previously in the old system. It gives a list of all assigned problems to the user. Note the Webwork Main menu on the left side

This is a pretty cramped environment. You can obtain the Webwork page view by "right clicking" on the Homework Sets option of the menu and selecting open in new tab or new window. This gives a better view of the Webwork environment.

Once you are here, you have the usual Webwork environment and can select the URL of the problem set you desire. Keep this tab or page open and return to Moodle. Let's add a real problem to the Moodle page.

Select and click "Add an activity or resource, as before

Select External Tool and hit Add.

In the External Tool page I entered First real problem set. I left Automatic as the Preconfigured tool. Now, open Webwork tab or page and select the problem set you want to assign. You can do this by clicking on the problem set in the Homework Sets page of by going to the Hmwk Sets Editor page and selecting it there. I've selected Homework 2 from the Homework Sets page

The URL is circled at the top. We don't want all of it only the part that defines the problem. Note the part that identifies the user. The entire URL is

https://webwork.wolfware.ncsu.edu/webwork2/ECE_421_001_Fall_2020/Homework_2/?effectiveUser=hjt@ncsu.edu&key=PLQ1h2XadnjDY1zXtpGZNhTkY8ExJJvB&user=hjt@ncsu.edu

but we want only the problem identifier

https://webwork.wolfware.ncsu.edu/webwork2/ECE_421_001_Fall_2020/Homework_2

Insert this in the External Tool page

🧩 Adding a new External tool to Homework Assignments ❓

▼ **General**

Activity name	🛑	First real problem set
Preconfigured tool	❓	Automatic, based on tool URL ⬍ ➕ ⚙ ✖
		Select content
Tool URL	❓	'webwork.wolfware.ncsu.edu/webwork2/ECE_421_001_Fall_2020/Homework_2
		✔ Using tool configuration: WeBWorK

Show more...

▶ **Privacy**

▶ **Grade**

▶ **Common module settings**

And click Save and return to course.

Once you have a real problem set link, you can delete the one that links to the entire Homework Sets page.

Having learned how to link the new Webwork problem sets we need to replace the links to the old sets. The old links are identified by the dark background of the Webwork icon.

✛ Homework Assignments ✐   Edit ▼

The homework sets have two components: the Matlab/Problems set and the WebWork problem set. Both are numbered with the same number and are due on the same date/time. Please follow instructions for submission and peer grading for the Matlab/problems part. The WebWork Problems are accessed by clicking the link below. The homework problems can be used for practice after the due date - just click on the button "Get a new version of this problem."

✛ 🌟 Orientation ✐   Edit ▼

✛ 📕 Matlab/Problems Homework   Edit ▼
Set 1 ✐

✛ 📕 Matlab/Problems Solutions   Edit ▼
and Grading Guide for Homework
1 ✐
            Restricted Available from **September 5 2019, 10:00 AM**

✛ 🌟 Webwork_Homework_1 ✐   Edit ▼

✛ 👥 Homework 1 Turn In and   Edit ▼ 👤
Grade ✐

Reminder: Currently this link will go to the problems on the old Math server. You cannot edit the link appropriately. You MUST delete the link and inset a new link to the Wolfware server. Let's replace the Orientation assignment.

Click on Edit and select and click Delete.

Click on Add an activity or resource. Clcik on External Tool and Add.

Activity name is Orientation

Find the URL of the Orientation problem set, as you did for the previous one for Homework 2. The External tool page looks like

Adding a new External tool to Projects❓

▾ **General**

Activity name ❗ [Orientation]

Preconfigured tool ❓ [Automatic, based on tool URL ⬍] ➕ ⚙ ✖

[Select content]

Tool URL ❓ [s://webwork.wolfware.ncsu.edu/webwork2/ECE_421_001_Fall_2020/Orientation]

✔ Using tool configuration: WeBWorK

Show more...

▸ **Privacy**

▸ **Grade**

▸ **Common module settings**

▸ **Restrict access**

Save and return to course.

The problem here is that the added activity goes at the bottom on the section.

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✛ Webwork homework 9 ✏   Edit ▾

✛ Solutions to Homework 9   Edit ▾
   (practice problems) ✏
         Restricted Available from **November 24, 2019**

✛ Practice Problems in Chapters   Edit ▾
   7,8, 10 ✏
         Hidden from students

✛ Practice problems homework   Edit ▾
   set 10 ✏

✛ Webwork homework 10 ✏   Edit ▾

✛ Solutions to Homework 10   Edit ▾
   ✏
         Hidden from students

✛ New example Webwork   Edit ▾
   Problem ✏

✛ First reall problem set ✏   Edit ▾

✛ Orientation ✏   Edit ▾

                                    ➕ Add an activity or resource

We need to move the link to the correct place at the top of the list in the section.

Click and hold on the placement icon to the left of the Webwork star icon, and moving it up. A single click on the move icon will give you a list of options of where to move the item. The list now looks like

✥ Homework Assignments ✏

Edit ▾

The homework sets have two components: the Matlab/Problems set and the WebWork problem set. Both are numbered with the same number and are due on the same date/time. Please follow instructions for submission and peer grading for the Matlab/problems part. The WebWork Problems are accessed by clicking the link below. The homework problems can be used for practice after the due date - just click on the button "Get a new version of this problem."

✥ ✦ Orientation ✏   Edit ▾

✥ 📕 Matlab/Problems Homework   Edit ▾
Set 1 ✏

✥ 📕 Matlab/Problems Solutions   Edit ▾
and Grading Guide for Homework
1 ✏
   Restricted Available from **September 5 2019, 10:00 AM**

✥ ✦ Webwork_Homework_1 ✏   Edit ▾

✥ 👥 Homework 1 Turn In and   Edit ▾ 👤
Grade ✏

After this we'll change each of the old Webwork problem sets to the new server. Yes, it is tedious.