



WeBWork-Blackboard Integration

Faculty login and content linking

Instructors' login

Instructors, TAs and professors' access and manage their WeBWork courses in the usual way as before the WeBWork-Blackboard integration. That means that they use the WeBWork front page <http://webwork.qcc.cuny.edu/webwork2>.

**WeBWork**

**MAA** MATHEMATICAL ASSOCIATION OF AMERICA

webwork / test_LTI

test_LTI

Please enter your username and password for **test_LTI** below:

Username:

Password:

Site Information

QCC Math Department

Welcome to the QCC WeBWork server.

Students: If you are unable to log in, please contact your instructor.

Instructors: For information or technical assistance, please contact one of the system's administrators or email to webwork@qcc.cuny.edu.

In the LTI's default configuration of WeBWork, accounts for users with roles of TA or higher are NOT created via Blackboard. That means that the accounts for the instructors are created manually in WeBWork by the system's administrators as it has been done since the system was implemented at QCC.

Instructors, professors and TAs cannot access WeBWork via Blackboard. If a user in one of these roles attempts to login into WeBWork via Blackboard, the following error message appears.

WeBWork error

An error occurred while processing your request. For help, please send mail to this site's webmaster (webwork@qcc.cuny.edu), including all of the following information as well as what you were doing when the error occurred.

Fri Jul 26 10:28:01 2019

Warning messages

```
***** parameters received ***** ext_lms => bb-3700.0.2-rel.36+fbf2221 oauth_consumer_key => webwork tool_consumer_info_product_family_code => BlackboardLearn oauth_signature => N2whcRm1zPJngt0Jsoz/P4H6s= tool_consumer_instance_description => City University of New York tool_consumer_instance_name => City University of New York context_id => cdd262997c52466fa70c79af16e9f83 oauth_callback => about:blank custom_caliper_federated_session_id => https://caliper-mapping.cloud9b.blackboard.com/v1/sites/5ed26b7a-8099-44c8-9823-6ca2e08104/sessions/74830f290061a4f785c327141107209a3 custom_tc_profile_url => https://bbhostedstage.cuny.edu/learn/api/v1/lti/profile/lti_version=lti-ip0 launch_presentation_return_url => https://bbhostedstage.cuny.edu/webapps/blackboard/execute/blti/launchReturn?course_id=1642145_1&content_id=41786584_1&toSC=false&launch_id=bf8b6ec-1e14-4178-a9b1-a6fa3f8784e6&link_id=41786584_1&launch_time=1564151280232 oauth_version => 1.0 oauth_signature_method => HMAC-SHA1 roles => urn:lti:role:ims/lis/Instructor resource_link_description => Assignment with Introduction to WeBWork lis_outcome_service_url => https://bbhostedstage.cuny.edu/webapps/gradebook/lti1grade lis_person_name_full => Dr. Bianca Sosnovski tool_consumer_instance_guid => 5591d91147c2486ab3e288180afcc949 context_label => QCC01_MA_336_PMT3_1189_1 lti_version => LTI-1p0 user_id => aeb889554189464992c5672cce80c3da launch_presentation_document_target => window oauth_timestamp => 1564151280 context_title => 2018 Fall Term (1) Statistics MA 336 PMT3[42324] (Queensborough CC) resource_link_title => WeBWork Orientation lis_person_sourcedid => 10846814 ext_launch_presentation_css_url => https://bbhostedstage.cuny.edu/common/shared.css,https://bbhostedstage.cuny.edu/themes/as_2015/theme.css,https://bbhostedstage.cuny.edu/branding/_1_1/brand.css?ts=1561481925080 tool_consumer_instance_contact_email => bbsupport@qcc.cuny.edu oauth_nonce => 822210899816282 lti_message_type => basic-lti-launch-request tool_consumer_info_version => 3700.0.2-rel.36+fbf2221 launch_presentation_locale => en-US lis_person_name_family => Sosnovski ext_launch_id => bf8b6ec-1e14-4178-a9b1-a6fa3f8784e6 lis_person_name_given => Bianca custom_caliper_profile_url => https://cunystage.blackboard.com/learn/api/v1/telemetry/caliper/profile/41786584_1 resource_link_id => 41786584_1 ***** summary ***** at /opt/webwork/webwork2/11b/ieBiork/Authen/LTIAdvanced.pm line 213. User id is [10846814] Use of uninitialized value in concatenation (.) or string at /opt/webwork/webwork2/11b/ieBiork/Authen/LTIAdvanced.pm line 215. User mail address is || Student id is [undefined] preferred_source_of_username is [lis_person_contact_email_primary] preferred_source_of_student_id is [undefined] ***** The following path was reconstructed by ieBiork. It should match the path in the LMS: at /opt/webwork/webwork2/11b/ieBiork/Authen/LTIAdvanced.pm line 380. http://webwork.qcc.cuny.edu/webwork2/test_LTI/MA-LTI-PMT3_Orientation/ at /opt/webwork/webwork2/11b/ieBiork/Authen/LTIAdvanced.pm line 381. The adjusted LTI roles defined for this user are: --Instructor Any initial "urn:lti:":ims/lis/ segments have been stripped off. The user will be assigned the highest role defined for them ***** New user: 10846814 -- requested permission level is 10. at /opt/webwork/webwork2/11b/ieBiork/Authen/LTIAdvanced.pm line 509.
```

Error messages

The instructor account with user id 10846814 does not exist. Please create the account manually via ieBiork. at /opt/webwork/webwork2/11b/ieBiork.pm line 321.

Call stack

The information below can help locate the source of the problem.

- in Corp::croak called at line 515 of /opt/webwork/webwork2/11b/ieBiork/Authen/LTIAdvanced.pm
- in ieBiork::Authen::LTIAdvanced::create_user called at line 426 of /opt/webwork/webwork2/11b/ieBiork/Authen/LTIAdvanced.pm
- in ieBiork::Authen::LTIAdvanced::authenticate called at line 310 of /opt/webwork/webwork2/11b/ieBiork/Authen/LTIAdvanced.pm
- in ieBiork::Authen::LTIAdvanced::verify_normal_user called at line 308 of /opt/webwork/webwork2/11b/ieBiork/Authen.pm
- in ieBiork::Authen::do_verify called at line 216 of /opt/webwork/webwork2/11b/ieBiork/Authen.pm
- in ieBiork::Authen::verify called at line 321 of /opt/webwork/webwork2/11b/ieBiork.pm

Request information

Account doesn't exist
because Bb doesn't
not create it

If an instructor uses the “Student Preview” mode in Blackboard, then a student account can be created in WeBWorK and they will be allowed to login to WeBWorK via Blackboard as any student would.

For security reasons, the cut off at the TA level for creation of LTI based accounts is to prevent instructors with LMS access to point to an existing WeBWorK URL to any other course. Thus, able to add themselves (and potentially their students) to somebody else’s course. With the default cut off to TA, the worst case is that an unauthorized student webwork account gets created for the course by a faculty using “Student Preview”.

Content linking in Blackboard

1) Enable LTI in Blackboard

In the Blackboard menu under “Customization” click on “Tool Availability”. Scroll down and make sure the box in the **QCC WeBWorK** row (in the “Available” column) is checked.

QBCC_PlayPosit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
QCC ALEKS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QCC VoiceThread LTIOne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
QCC WeBWorK	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Check this box


2) Create an assignment

Instructors create assignments in WeBWorK as usual. For more information about this, check <https://github.com/bsosnovski/WW-Converter>

The necessary steps in creating an assignment in WeBWorK are:

- Name the new assignment (e.g. MA-LTI-PNT3_Orientation).
- Select the questions/problems to be part of the assignment.
- Set dates for when the assignment opens, closes and when the answers will be available.
- Make the assignment visible.

The last two steps are shown below.

 **MAA** MATHEMATICAL ASSOCIATION OF AMERICA

< webwork / test_lti / instructor tools / hmwk sets editor / Set Detail 2 for set MA-LTI-PNT3_Orientation

Set Detail 2 for set MA-LTI-PNT3_Orientation

This set **MA-LTI-PNT3_Orientation** is assigned to all students. Edit [individual versions](#) of set MA-LTI-PNT3_Orientation.

Any changes made below will be reflected in the set for **ALL** students.

Save Changes

Reset Form

General Information

Opens

06/25/2019 at 11:59pm

Closes

07/26/2019 at 03:59pm

Answers Available

07/28/2019 at 11:59pm

Visible to Students

Yes

Hide Hints from Students

No

Assignment type

homework

Set dates

Make the assignment visible

Set Description

3) Linking the assignment in Blackboard

Once the WeBWorK assignment is ready, the instructor will need to make a link/assignment in Blackboard that students can use to get to WeBWorK.

- Go to the content area where you want the assignment link to appear.
- Go Build Content > Web Link.
- Add a name for the assignment.
- Add the URL of the assignment you are linking to. (the URL looks like: **<http://webwork.qcc.cuny.edu/webwork2/CourseName/Assignment>**)
- Check the box "This link is a Tool Provider".
- Enable Evaluation and make visible to students.
- Set the number of points (same as in WeBWorK)
- (Optional) Set the due date in Blackboard.
- (Recommended) Set the link to open the assignment in a new window.

Example:

A valid link for linking an assignment is like

http://webwork.qcc.cuny.edu/webwork2/test_LTI/MA-LTI-PNT3_Orientation

Note:

Visibility and due dates of assignments are not automatically synchronized. Changing these in WeBWorK doesn't change them automatically in Blackboard. Though instructors have to set these features in both systems separately, it is recommended that instructors to set due dates also in Blackboard and to allow WeBWorK to control the availability of the assignments.

Edit Web Link

A Web Link is a shortcut to a Web resource. Add a Web Link to a Content Area to provide a quick access point to relevant materials. [More Help](#)

* Indicates a required field.

WEB LINK INFORMATION

* Name

* URL
For example, http://www.myschool.edu/

☒ This link is to a Tool Provider. [What's a Tool Provider?](#)

Enable Evaluation ☒ Yes ☐ No

To set additional evaluation options, use the Column settings in the Grade Center

* Points Possible

Visible to Students ☒ Yes ☐ No

Due Date
Enter dates as mm/dd/yyyy. Time may be entered in any increment.

Now everything is set up and ready for the students.

The following shows the assignments links created in the content area called "WeBWorK LTI."

WeBWork LTI

Build Content
Assessments
Tools
Partner Content

WeBWork Orientation

Enabled: Statistics Tracking
Assignment with Introduction to WeBWork

WeBWork HW 1

Enabled: Statistics Tracking
First homework assignment.

WeBWork HW 2

Enabled: Statistics Tracking
Second homework assignment

Grade sync

The LTI configuration in WeBWork is set to return the total score for each assignment to Blackboard. In other words, instructors will see multiple columns in Blackboard Grade Center, one for each link/assignment, which will be filled out with the students' scores on individual WeBWork assignment.

WeBWork will attempt to update student grades every time they submit an answer to a problem. This keeps the student grades current. One possible downside of this feature is that it can drain our QCC WeBWork server.

Below is an illustration of the corresponding columns created in the Grade Center based on the assignments shown above. These columns will be filled with scores as students access the assignments using the links provides in Blackboard.

Grade Center : Full Grade Center

The Full Grade Center displays all columns and rows in the Grade Center and is the default view of the Grade Center. [More Help](#)

Create Column
Create Calculated Column
Manage
Reports
Filter
Discover Content
Work Offline

Move To Top
Email

Sort Columns By: Layout Position
Order: ▲Ascending

Grade Information Bar

<input type="checkbox"/>	LAST NAME	FIRST NAME	INTRODUCTIO NS	WEBWORK ORIENTATION	WEBWORK HW 1	WEBWORK HW 2
Selected Rows: 0						

Move To Top
Email

Icon Legend

Edit Rows Displayed

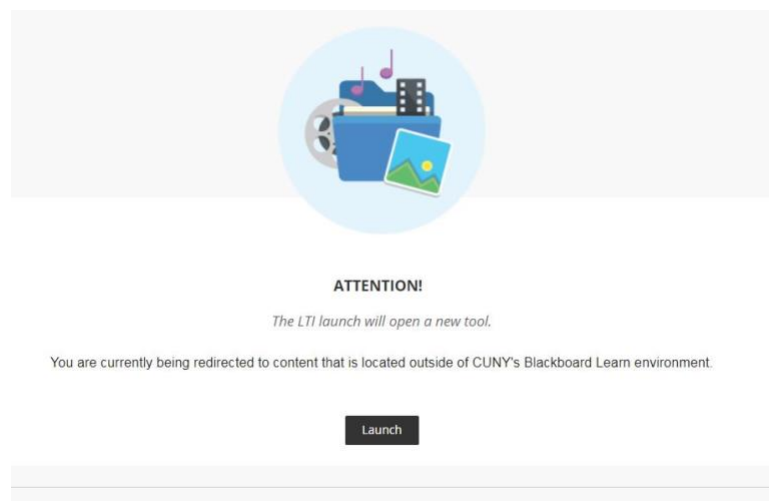
Testing the system as a student

Students' login

With the WeBWorK-Blackboard integration via LTI, Blackboard automatically creates students accounts in WeBWorK. A password will not be required from the students to access WeBWorK. Students are automatically assigned to all visible homework sets.

Students' accounts created via Blackboard will not have neither a student ID nor an initial password in WeBWorK. Students will not be able to login into WeBWorK directly. There is only one way for students to login. They must log in to Blackboard and select a WeBWorK assignment.

Students see the link(s) to their WeBWorK assignment(s) in the Content area in Blackboard. They will use the link(s) to access WeBWorK assignment(s). Once students click on a link, they receive a notification that they will be redirected to an application outside Blackboard.



The screenshot below shows what a student see after there are logged in to WeBWorK.

The screenshot shows the WeBWorK interface for the MA-LTI-PNT3 Orientation assignment. At the top is a blue header with the MAA logo and the text "MATHEMATICAL ASSOCIATION OF AMERICA". To the right of the header, it says "Logged in as 20081121023300940175" with a "Log Out" button. Below the header is a breadcrumb trail: "webwork / test_lti / MA-LTI-PNT3_Orientation". The main heading is "MA-LTI-PNT3 Orientation". Below this is a "Homework Sets" button. A table lists the problems with columns for Name, Attempts, Remaining, Worth, and Status. To the right of the table is a "Set Info" box containing the assignment name and due date, and a list of functions and symbols. At the bottom are buttons for "Email Instructor" and "Download PDF or TeX Hardcopy for Current Set".

Name	Attempts	Remaining	Worth	Status
Problem 1	2	unlimited	1	100%
Problem 2	1	unlimited	1	100%
Problem 3	1	unlimited	1	100%
Problem 4	1	unlimited	1	60%
Problem 5	3	unlimited	1	100%
Problem 6	1	unlimited	1	100%
Problem 7	2	unlimited	1	100%
Problem 8	1	unlimited	1	100%

Set Info

WeBWorK Assignment MA-LTI-PNT3_Orientation is due : 07/26/2019 at 03:59pm EDT.

Here's the list of functions and symbols which WeBWorK understands.

The login was successfully done via Blackboard and the student is able to submit answers to the assignment before or on the due date.

Through a customization of WeBWorK's configuration, section and semester/year that are passed to WeBWorK as well. The information helps to facilitate instructors' management of their course accounts in system.

Once in WeBWorK students navigate and finish assignments in exactly the same way they normally would. WeBWorK behaves just as it would if there were no connection to Blackboard at all. The only difference is when students submit a grade, they should get a message like the one below about the status of the submission.

MA-LTI-PNT3 HW 1: Problem 12

[Previous Problem](#)[Problem List](#)[Next Problem](#)

Results for this submission

Entered	Answer Preview	Result
3	3	correct
$y-3x = 0$	$y - 3x = 0$	correct

All of the answers above are correct.

(1 point) Find the slope and the equation for the line passing through the points: $(-1, -3)$ and $(0, 0)$.

Note: If the slope does not exist, enter: **Does not exist**

a) $m =$

3

b) The equation for the line:

$y=3x$

Note: You can earn partial credit on this problem.

[Preview My Answers](#)[Submit Answers](#)

I estimate that you answered ~~zero~~ questions incorrectly.

~~Your score was recorded. Your score was successfully sent to the LMS~~

~~You have attempted this problem 3 times.~~

You received a score of 100% for this attempt.

Your overall recorded score is 100%.

You have unlimited attempts remaining.

From instructors' perspective, WeBWork's classlist shows the newly student account created with time stamp of the latest grade submission to the LMS, section and semester/year of the course enrollment.

Classlist Editor

[Show/Hide Site Description](#)

Select an action to perform:

Filter Sort Edit Password Import Export Add Delete

Show Which Users?:

What field should filtered users match on?:

Filter by what text?:

[Take Action!](#)

Showing 11 out of 11 users

Section and year/ semester are provided in the student's profile

Time stamp updated every time student submit an answer in Ww

	Login Name	Login Status	Assigned Sets	First Name	Last Name	Email Link	Student ID	Status	Section	Recitation	Comment	Permission Level
<input type="checkbox"/>	admin	Inactive	6/7		Administrator	Email	admin	Enrolled				admin
<input type="checkbox"/>	admin2	Active	6/7		Administrator	Email	admin2	Enrolled				admin
<input type="checkbox"/>	admin4	Inactive	6/7		Administrator	Email	admin4	Enrolled				admin
<input type="checkbox"/>	admin3	Inactive	6/7		Administrator	Email	feye	Enrolled				admin
<input type="checkbox"/>	dbejar	Inactive	6/7	Denis	Bejar	Email		Enrolled	Ed Admin			professor
<input type="checkbox"/>	nkhomyak	Inactive	7/7	Khomyak	Nataliya	Email		Enrolled	LT test			professor
<input type="checkbox"/>	bsosnovski	Inactive	6/7	Bianca	Sosnovski	Email	bsosnovski	Enrolled				professor
<input type="checkbox"/>	10846814_previewuser	Inactive	6/7	Bianca	Sosnovski_PreviewUser			Enrolled			07/26/2019 at 01:18pm EDT	student
<input type="checkbox"/>	bsosnovski1	Inactive	6/7	test	test	Email	bsosnovski1	Enrolled	test			student
<input type="checkbox"/>	20081121023300940174	Inactive	6/7	Qbcc	Testperson			Enrolled	MA 336 PNT3[42324]	2018 Fall	08/01/2019 at 06:44pm EDT	student
<input type="checkbox"/>	20081121023300940175	Active	6/7	Qbcc	Testperson	Email		Enrolled	MA 336 PNT3[42324]	2018 Fall	08/01/2019 at 06:51pm EDT	student

The following is the student's view in Blackboard's "My grades".

My Grades

All Graded Upcoming Submitted Order by: **Course Order**

ITEM	LAST ACTIVITY	GRADE
WeBWork Orientation DUE: JUL 26, 2019	Jul 25, 2019 3:02 PM GRADED	0.00 /8
WeBWork HW 1 DUE: JUL 27, 2019	Jul 26, 2019 10:30 AM GRADED	0.00 /100
WeBWork HW 2 DUE: JUL 28, 2019	UPCOMING	- /15

Active links

Not active link because student haven't clicked the link to the assignment

After submitting an assignment, the debugging message in WeBWorK shows that the grade was passed successfully to the LMS.

The student sees the following in WeBWork's grades.

Qbcc Testperson

[illegible]

And faculty sees the following in Blackboard's Grade Center.

Grade Center : Full Grade Center

The Full Grade Center displays all columns and rows in the Grade Center and is the default view of the Grade Center. [More Help](#)

Create Column Create Calculated Column Manage Reports Filter Discover Content Work Offline

Grade Information Bar

Sort Columns By: Layout Position Order: Ascending

	LAST NAME	FIRST NAME	USERNAME	LAST ACCESS	WEBWORK ORIENTATION	WEBWORK HW 1	WEBWORK HW 2
<input type="checkbox"/>	Sosnovski_Preview1	Bianca	10846814_preview	July 26, 2019	4.96
<input type="checkbox"/>	Testperson	Qbcc	200811210233009	July 26, 2019	7.60	0.00	0.00

Selected Rows: 0

Move To Top Email

Link never clicked by user

Latest score passed to Bb

Link clicked by user but not answer submitted to the system

Icon Legend Edit Rows Displayed

If assignments are made visible in WeBWork but are without links in Blackboard or their links were never used by the user, students will be able to see the sets but not access them direct via WeBWork.

MAA MATHEMATICAL ASSOCIATION OF AMERICA

Logged in as 20081121023300940175. Log Out

webwork / test_LTI

test_LTI

Homework Sets	
Name	Status
MA-LTI-PNT3 Orientation	Open, closes 07/26/2019 at 11:59am EDT.
MA-LTI-PNT3 HW 1	Open, closes 07/27/2019 at 11:59pm EDT.
MA-LTI-PNT3 HW 2	Open, closes 07/28/2019 at 11:59pm EDT.
MA-LTI-PNT3 HW 4	Open, closes 07/28/2019 at 11:59pm EDT. You must log into this set via your Learning Management System (e.g. Blackboard, Moodle, etc...).
MA-LTI-PNT3 HW 3	Open, closes 07/29/2019 at 11:59pm EDT. You must log into this set via your Learning Management System (e.g. Blackboard, Moodle, etc...).
MA-LTI-PNT3 HW 5	Open, closes 07/30/2019 at 11:59pm EDT. You must log into this set via your Learning Management System (e.g. Blackboard, Moodle, etc...).

Assignments with links in Bb

Assignments created in Ww but without links in Bb

Course Info

Welcome to WeBWork!

College: QCC - CUNY

Prof: B. Sosnovski

MAIN MENU
Courses
Homework Sets
MA-LTI-PNT3 HW 5
User Settings
Grades

Sets

MA-LTI-PNT3 HW 1
MA-LTI-PNT3 HW 2
MA-LTI-PNT3 Orientation

Available assignments to user in Ww

webwork / test_lti / MA-LTI-PNT3_HW_5

MA-LTI-PNT3 HW 5 - Closes 07/30/2019 at 11:59pm EDT

Homework Sets

The selected problem set (MA-LTI-PNT3_HW_5) is not a valid set for 20081121023300940175.
You must use your Learning Management System (E.G. Blackboard, Moodle, Canvas, etc...) to access this set. Try logging in to the Learning Management System and visiting the set from there.

Page generated at 07/26/2019 at 12:43pm EDT
WeBWorK © 1996-2019 | theme: math4 | ww_version: WeBWorK-2.14 | pg_version PG-2.14 | The WeBWorK Project

Note:

In Blackboard, instructors do not have grades. In this case they will see the message "Your score was not successfully sent to the LMS". This is OK. The following shows what they see in WeBWorK.

MA-LTI-PNT3 HW 1: Problem 14

Previous Problem Problem List Next Problem

This set is **visible to students**.

Results for this submission

Entered	Answer Preview	Result
$2x + y = 2$	$2x + y = 2$	correct

The answer above is correct.

(1 point) Library/CollegeOfIdaho/setAlgebra_02_04_PointSlopeFormofLine/24IntAlg_26_LinearFunction.pg
Find the equation for the line passing through the point $(2, -2)$ and perpendicular to the line whose equation is $-2x + 4y + 8 = 0$.

Answer:

[Solution:](#)

Edit2 Edit3

Show: ☐ CorrectAnswers ☐ AnswerGroupInfo ☐ Show Auxiliary Resources ☐ AnswerHashInfo ☐ PGInfo

Preview My Answers Check Answers Submit Answers

I estimate that you answered **zero** questions incorrectly.
Your score was recorded. Your score was not successfully sent to the LMS.
You have attempted this problem 1 time.
You received a score of 100% for this attempt.
Your overall recorded score is 100%.
You have unlimited attempts remaining.

Instructors can switch to the "Student Preview" mode and click on the assignment link. Once the Instructors successfully logged in and see the assignment and try answering some questions, they will see the corresponding scores appear in your student preview account in Blackboard's Grade Center. If any of these steps are unsuccessful, they need to troubleshoot.

Student preview mode ensures grades are passed back to Blackboard; otherwise, grades are not be passed back. In either case, Blackboard logs you into the same account in WeBWorK.

Student Preview mode is ON

2018 Fall Term (1) Statistics MA 336 PNT3[42324] (Queensborough CC) My Grades

2018 Fall Term (1)
Statistics MA 336
PNT3[42324]
(Queensborough CC)

Announcements

Contact Information

Getting Started (Before classes start)

Course Information

Grading Policy

My Grades

Ask a question to the instructor

My Grades

ITEM	LAST ACTIVITY	GRADE
WebWork Orientation DUE: JUL 26, 2019	JUL 26, 2019 1:22 PM GRADED	4.96 /8
WebWork HW 1 DUE: JUL 27, 2019	UPCOMING	- /100
WebWork HW 2 DUE: JUL 28, 2019	UPCOMING	- /15

Order by: Course Order

Other WeBWorK's features:

One of the important features in WeBWorK is the button, [Email instructor](#) which students use to communicate with instructors about a specific problem in the assignment posted.

If a student clicks on the button, she/he will be taken to a page where they can type a question that will be sent to your instructor. Then the instructor will receive a link that will take her/him directly to the problem student is working on.

< webwork / test_Iti / Feedback

E-mail Instructor

From: mail@gcc.cuny.edu

Use this form to report to your professor a problem with the WeBWorK system or an error in a problem you are attempting. / included.

E-mail:*

Student's email passed from Bb to Ww

Send E-mail

Cancel E-mail

This WeBWorK's feature helps faculty to provide feedbacks to students.

Summary

With the integration, the Department's WeBWorK server allows direct login via Blackboard and it includes:

- Automatic creation of WeBWorK student accounts from Blackboard (**successful**);
- Single login via Blackboard (**successful**);
- Automatic grade passback from WeBWorK to Blackboard (**successful**);
- Assignments are assigned to users once visible (**successful**).

What remains the same:

- WeBWorK courses are created at the request of course instructors by the department WeBWorK administrators;
- Instructor accounts must be manually created on WeBWorK;
- Assignments are created, opened and closed on WeBWorK.