

Manual for Grading for Canvas



For Professors and Graders

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Login & Setup

Welcome to Canvas Grading Extension

Please login using your Cornell email account

[Login](#)

Figure 1: Login Page

Navigation

Figure 1:

- This is the first screen you will see when entering Grading for Canvas
- Clicking on the blue login text will take you to the Google authentication screen

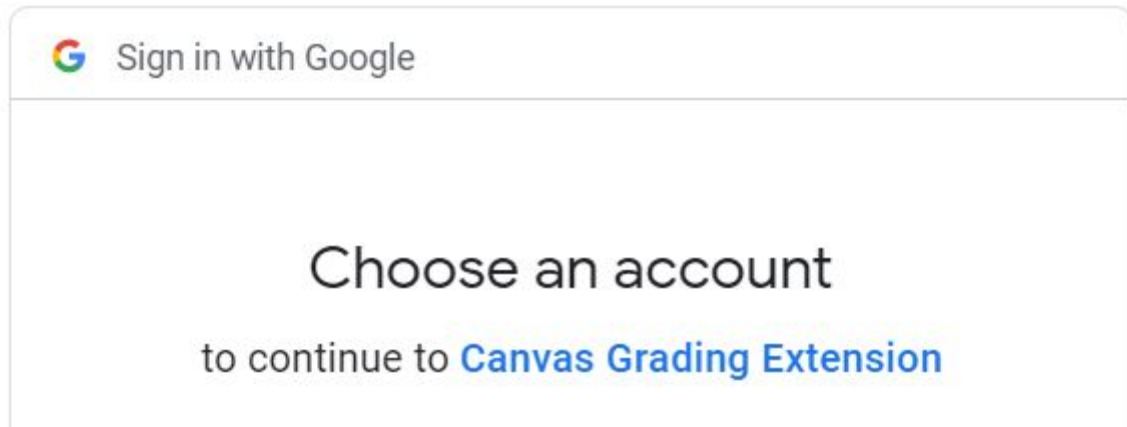


Figure 2: Authentication

Figure 2:

- Here, you will be prompted to sign in with an authorized Google account
- **Use your Cornell provided G Suite account to login**
- Successfully logging in with an authorized Google account will take you to the main web app.

Professor Setup

- To enable the course, Grading for Canvas requires the professor to first enter their course ID, and then enter their Cornell bearer token

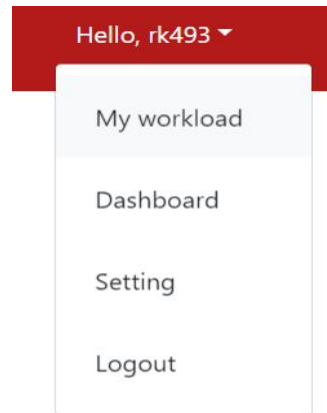


Figure 3: Dropdown Menu

- Use the dropdown bar on the top right of the app to enter your settings

Course ID

Link your course ID from Canvas

 [Link course](#)

Figure 4: Course ID update

- Next, you will be able to enter your course ID to link the app to your course (Figure 5); **Make sure you link your course before entering your bearer token**
- Only the professor has access to updating course ID

- Once the course is successfully linked, enter your valid Canvas bearer token- to do so, you will need to enter your Canvas account

Your canvas token

Visit your account section in Canvas, then go into settings to generate a token

Update

Figure 5: Canvas Token

- Now you will need to enter a valid canvas bearer token in order to use this app, to do so you will need to login to your Canvas account
- To generate a bearer token you can go to Canvas Settings (Figure 6)

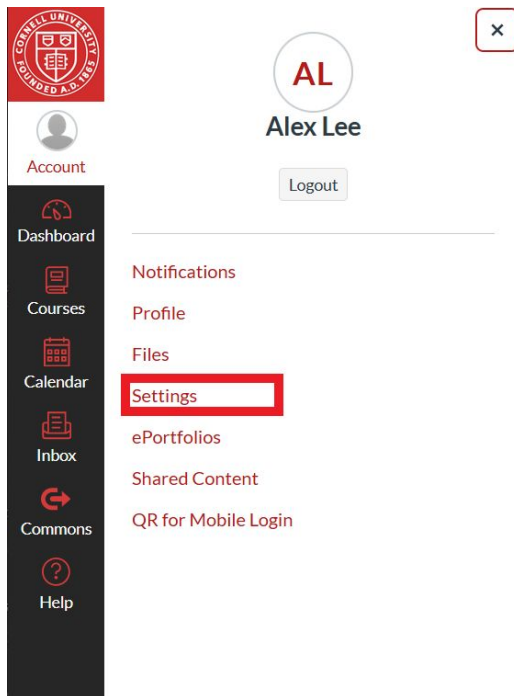








Figure 6: Canvas Token

- Then navigate down to Approved Integrations and select +New Access Token (Figure 7)

Approved Integrations:

These are the third-party applications you have authorized to access the Canvas site on your behalf:

App	Purpose	Dates	
User-Generated	Web App for Grading	Expires: never Last Used: May 13 at 3:01pm	details 
Panopto		Expires: never Last Used: --	details 
Google Drive LTI IAD-Prod		Expires: Apr 29 at 5:11pm Last Used: Aug 29, 2019 at 2:23pm	details 
Panopto		Expires: never Last Used: --	details 
Kaltura		Expires: never Last Used: Oct 1, 2019 at 2:12am	details 
Rollcall		Expires: never Last Used: Mar 11 at 2:43pm	details 

[+ New Access Token](#)

Figure 7: Canvas Token

- Then you can copy and paste the token into the app (Figure 5), and click update
- Now you are free to use the app as you please and utilize the Professor's Dashboard

Grader Setup

- To enable grading, Grading for Canvas requires every grader to authenticate via a bearer token

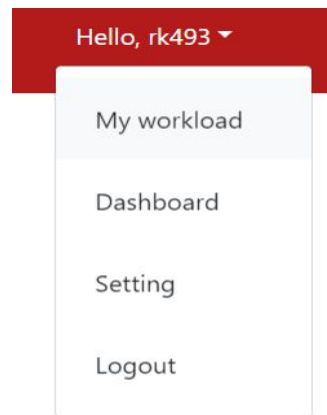


Figure 8: Dropdown Menu

- Use the dropdown bar on the top right of the app to enter your settings

Your canvas token

Visit your account section in Canvas, then go into settings to generate a token

Figure 9: Canvas Token

- Now you will need to enter a valid canvas bearer token in order to use this app, to do so you will need to login to your Canvas account
- To generate a bearer token you can go to Canvas Settings (Figure 10)

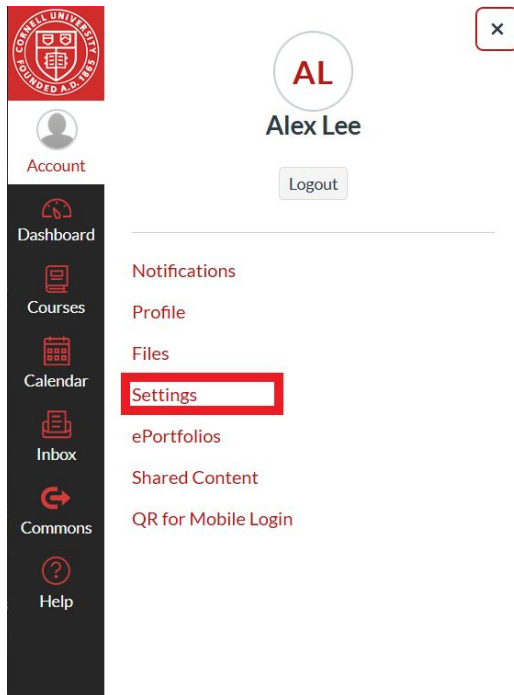








Figure 10: Canvas Settings

- Then navigate down to Approved Integrations and select +New Access Token (Figure 11)

Approved Integrations:

These are the third-party applications you have authorized to access the Canvas site on your behalf:

App	Purpose	Dates	
User-Generated	Web App for Grading	Expires: never Last Used: May 13 at 3:01pm	details 
Panopto		Expires: never Last Used: --	details 
Google Drive LTI IAD-Prod		Expires: Apr 29 at 5:11pm Last Used: Aug 29, 2019 at 2:23pm	details 
Panopto		Expires: never Last Used: --	details 
Kaltura		Expires: never Last Used: Oct 1, 2019 at 2:12am	details 
Rollcall		Expires: never Last Used: Mar 11 at 2:43pm	details 

[+ New Access Token](#)

Figure 11: Canvas Token

- Then you can copy and paste the token into the app (Figure 9), and click update
- Now you are free to use the app as you please

Professor's Dashboard

Key for Table

Name- name of the grader

Weight - the amount of grading the grader should have relative to other graders

- A higher weight means more assignments will be distributed to the grader
- Professor can change the weights at any time

- Universal and carries through assignments (changing the weight for a grader for one assignment will change the weight for other assignments, until it is once again manually changed)

Offset - the difference between the number of submissions a grader should have graded determined by their weight and the number of submissions they have actually graded up until now

- Always a positive number
- If a grader should be grading 5 submissions as per their weight, but is only able to grade 3 submissions for this assignment, their offset becomes $5 - 3 = 2$, so they will have to make up 2 submissions in the next distribution
- Professor can change the offsets at any time, although distributing assignments may also change the offsets
- Universal and carries through assignments (if a grader has an offset of 2 at the end of one assignment, it will still have an offset of 2 at the beginning of the next assignment)

Cap - the maximum number of assignments the grader can be distributed for the assignment

- Must be ≥ 0
- If a student grades 5 submissions for an assignment, then the cap cannot be reduced to an integer below 5 as graded submissions are not redistributed
- Professor can change the cap at any time
- Specific to the assignment (changing the cap for a grader for one assignment will not change their cap for another assignment)

Workload- opens a view of the list of students a grader has to grade and the status on whether their submission has been graded or not

- Only the professor has the ability to view this column

Assigned - the number of submissions the grader has been assigned

- The result of running the distribution algorithm with the weights, offsets, and caps taken into account
- Professor cannot change this directly
- Specific to the assignment (the number of assigned submissions for a grader may differ assignment to assignment)

Progress Bar - displays the progress of a grader in grading their submissions for the assignment

- An empty, gray progress bar means no submissions were graded. A half blue progress bar means half the submissions were graded, and a fully blue progress bar means all submissions were graded, etc
- The number over the bar is the number of assignments the grader has graded until now
- Professor cannot change this directly, it will update as the grader passes back grades to Canvas
- Specific to the assignment (a grader's progress in grading for one assignment is separate from their progress on another assignment)

Sync with Canvas

Progress for 1

NetId	Weights	Offsets	Cap	Assigned	Workload	Progress
mi252	<input type="text" value="1"/>	<input type="text" value="7"/>	<input type="text" value="5"/>	5	View	<div></div>
2	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="100"/>	32	View	<div></div>
3	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="100"/>	32	View	<div></div>
jg656	<input type="text" value="1"/>	<input type="text" value="13"/>	<input type="text" value="20"/>	20	View	<div></div>
5	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	33	View	<div></div>
6	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	33	View	<div></div>
7	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	32	View	<div></div>
8	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	33	View	<div></div>
9	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	34	View	<div></div>
10	<input type="text" value="1"/>	<input type="text" value="34"/>	<input type="text" value="0"/>	0	View	<div></div>
11	<input type="text" value="1"/>	<input type="text" value="34"/>	<input type="text" value="0"/>	0	View	<div></div>
12	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	34	View	<div></div>

Figure 12: Grader Details View

Update

Distribute

Dashboard

Sync with Canvas

Progress for 1

NetId	Weights	Offsets
mi252	<input type="text" value="1"/>	<input type="text" value="7"/>
2	<input type="text" value="1"/>	<input type="text" value="1"/>
3	<input type="text" value="1"/>	<input type="text" value="1"/>
jg656	<input type="text" value="1"/>	<input type="text" value="13"/>
5	<input type="text" value="1"/>	<input type="text" value="0"/>
6	<input type="text" value="1"/>	<input type="text" value="0"/>
7	<input type="text" value="1"/>	<input type="text" value="0"/>
8	<input type="text" value="1"/>	<input type="text" value="0"/>
9	<input type="text" value="1"/>	<input type="text" value="0"/>
10	<input type="text" value="1"/>	<input type="text" value="34"/>

312

343

43

60

85

Close

Figure 13: Submissions View

Sync with Canvas ▾

Progress for Mango1 ▾

			Cap	Assigned	Workload	Progress
jce322	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	1	View	
ag759	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="100"/>	1	View	
cal368	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	1	View	
dt377	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="100"/>	1	View	
mi252	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="2"/>	2	View	<div><div>1</div></div>
pg334	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="100"/>	1	View	
rk493	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="100"/>	1	View	

Figure 14: Syncing View

Navigation

Figure 12:

- This is the first screen you will see on the Professor Dashboard
- Select the assignment you want to view from the dropdown on the top right
- It contains columns with the graders netids, weights, offsets, caps, assigned, workload, and progress (explained above in the key)
- Weights and offsets are text fields and can be changed for the grader with the netid in that row. Changes can be saved by clicking on the Update button on the bottom
- Once the above quantities are as desired, select the Distribute button on the bottom to distribute assignments to graders, which will update the “Assigned” column

- To view which students a grader is grading, select the “view” option in their column, which will take you to Figure 13
- As graders grade assignments, the progress bar in the the Progress column will be filled accordingly, which will also include the number of assignments that grader has graded until now
- Select the Sync From Canvas button to pull data from Canvas, bringing you to Figure 14

Figure 13:

- This view is specific to the grader you selected “view” for
- There is a list of student submissions that grader has to grade for the selected assignment
- There is a red dot next to it if the submission still needs to be graded, and a green dot next to it if the submission has already been graded
- Select Close to go back to Figure 12

Figure 14:

- This view is set and gives you the options when you select Sync From Canvas
- Selecting Sync assignments and submissions pulls the assignments and submissions from Canvas to be graded (this allows the dropdown menu with assignments to be updated and gives assignments that can be distributed using the algorithm)
- Selecting Sync Graders pulls all people from the Canvas course with a role of TA, instructor, or grader and assigns them a row in the graders table in Figure 12
- Selecting Sync assignments and submissions and selecting selecting Sync graders can be done in either order

The Distribution Algorithm

Goal: Fairly and randomly distribute all unassigned submissions to graders according to their respective weights, offsets, and caps

- Assignments are distributed first according to offsets
- Remaining assignments are distributed according to weights → $(\text{grader's weight}) / (\text{total weight})$ is the fraction of the total submissions the grader is additionally assigned (rounded down to the nearest integer)
- Leftover assignments are randomly distributed to graders, and offsets are adjusted to take this into account (these graders will have one assignment less to grade in the future)
- If the number of assigned submissions exceeds a grader's cap, these extra submissions are distributed evenly (not by weights) amongst other available graders, and offsets are adjusted for everyone accordingly

How to Distribute Assignments

- Select the assignment you want to distribute for in the drop down menu
- Adjust the weights, offsets, and caps for each grader as desired
- Click the update button to save changes at any point
- Once the weights, offsets, and caps are finalized, click the distribute button to distribute assignments to the graders

Scenarios

Equal weights, offsets set to 0, all caps are 100

- Everyone will get approximately the same number of submissions to grade

Weights, offsets, and caps are set to different positive numbers (abiding my restrictions described above)

- Graders with higher weights and offsets will receive relatively more assignments

- If offsets are > 0 , it will decrease as the grader makes up submissions
- The number of submissions graders get assigned will never exceed their caps

A student has a conflict and cannot grade all the submissions they initially were assigned

- Professor can adjust the cap to be at least number of submissions the grader has already graded
- The grader's offset increases due to rounding errors and due to the difference in number of assignments in assigned and cap for that grader
- The remaining submissions get evenly distributed to other available graders, adjusting their offsets accordingly (however, the offsets of graders with weights that equal 0 are not adjusted by an automated means, since they are not considered to be active graders)

Professor attempts to change weight, offset, or cap in a way that violates its requirements

- An error message will pop up
- These values will not get updated

A grader wants to take a leave without penalty

- Professor can change the weight & cap of this grader to 0 so no submissions will be assigned to them, and their offsets will remain constant
- Grader will have their offset changed, since they do not need to make up these submissions
- Weight can be changed back by professor when leave is over

Grader's View

Canvas grading extension



Assignments

Final Mixed

Download

Bulk edit

fifth@mailinator.com	<div></div>
five@mailinator.com	<div></div>

Figure 15: Submissions View

Assignments

Final Mixed

Download

Back

Fifth@mailinator.com

Grade out of 100

20

Enter feedback here

[Past comments](#) [Attachments](#)

Five@mailinator.com

Grade out of 100

Enter feedback here

[Past comments](#) [Attachments](#)

Submit feedback

Figure 16: Bulk Edit View

Figure 17: Single Edit View

Navigation

Figure 15

- This is the first page seen by a grader when getting to grader view
- The drop down on the left contains a list of the assignments to navigate to
- Once you are on an assignment, there will be a list of submissions represented by netids of the students (shown above as emails)
- A green dot means the submission is graded, and a red dot means the submission is ungraded
- To submit feedback for one person, click on their netid (or in the above case, email), which will take you to Figure 17
- To submit feedback for multiple people, click on the Bulk Edit button, which will take you to Figure 16

Figure 16

- This is where you submit grades and feedback
- Every submission has a box to input the grade (Grade out of 100) and a box to enter feedback (Enter feedback here)
- To view preview comments for a submission, select Past comments under the particular submission
- Select Submit feedback which send the information to Canvas

- To get back to the list and status of submissions, click Back, which will take you to Figure 15

Figure 17

- This is where you can submit grades and feedback for one person
- Type in the grade you want to give them in the designated box labeled Grade out of 100 and the comment you want to give them in the box with Enter feedback here
- Select Submit feedback which will send the information back to Canvas

Downloads

- Grader can click on the Download button (present in both figures), which will download a folder containing all the submissions to grade (labelled by the students netids)
- In the Figure 2: Bulk Edit View, grader can select attachments under a specific student to download that particular student's submission

Grade Passback

- Type in the grade and feedback for the submission you want to submit this for (in the boxes as described above)
- Click the Submit Feedback button at the bottom, which will send the grades and feedback to Canvas
- Whatever students you give grades and feedback to will be sent to Canvas, and the students you leave blank will remain untouched (this means you can submit grades over as many cycles as you want)

Resetting Course Data

Reset course data

This will remove graders, submissions and assignments

This change cannot be undone. Confirm by DELETE ALL COURSE DATA to continue

Reset course

Figure 18: Reset

- The professor has the option to remove all course data from the web app by using the reset course button
- This option is found in the settings section of your dropdown menu
- You must type “DELETE ALL COURSE DATA” before clicking on the reset button