

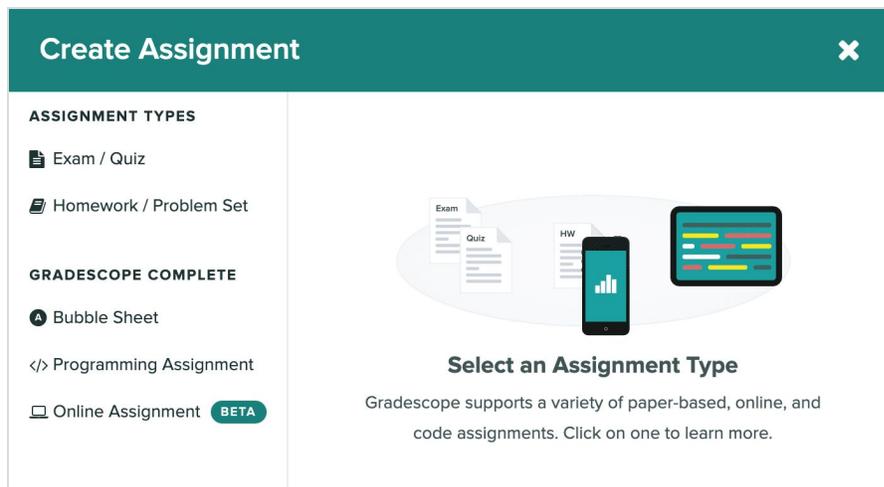
Creating assignments with LockDown Browser

With timed Online Assignments in Gradescope, you will be able to enable **LockDown Browser Powered by Respondus**. Enabling this feature takes your students to a secured browser window and prohibits them from opening other windows, browsers, or applications until their work is complete. In this guide, you'll learn how to set up your timed Online Assignment ([Page 1](#)), add your questions ([Page 1](#)), enable **LockDown Browser** ([Page 3](#)), submit work for students if needed ([Page 4](#)), and grade submissions ([Page 4](#)).

Operating Systems: LockDown Browser is compatible with **Windows** and **Mac OS**, but **not Chrome OS**.

Setting up a timed Online Assignment

1. Before you can enable LockDown Browser, you first will need to create a timed Online Assignment. To do that, go to your course's homepage and click **Create Assignment** (bottom right).
2. Select "Online Assignment" from the list of assignment types.
3. Add an assignment title, set a release date, due date, and (Optional) late due date.
4. Next, select "Enforce Time Limit." Then, use the **Maximum Time Permitted** field to set your time limit.
5. Click **Create Assignment**. This will take you to the **Assignment Editor** where you add your questions.



Adding your questions

1. On the left side of your **Assignment Editor**, enter your first question title (optional) and point value. You can preview your assignment on the right side of your screen as you add questions.
2. Next, add your question text in the **Problem Field**. You can use LaTeX and Markdown if needed to format the question text.
3. In the **Problem Field**, put your cursor below your question text. Click the **Insert Field** dropdown.
4. From the dropdown, select the way you'd like students to answer this question: short answer, free response, multiple-choice, select all, or file upload. You can add multiple answer fields to a question if you'd like, but be sure each answer field is on a line by itself.
5. Repeat this process for each question in your assignment. Then, click **Save**.

Understanding answer input fields

We currently support **Short Answer**, **Free Response**, **Multiple Choice**, **Select All**, and **File Upload** fields. For **Multiple Choice**, **Select All**, and **Short Answer** questions, you'll supply the correct answer, and we'll automatically grade your students' responses. A question can have multiple input fields, in which case the student must get all of them correct to receive credit. Input markup must be the only thing on the line that it occurs on. This means that you currently cannot have text before or after an input field.

The screenshot shows a question editor interface. At the top, there's a header with 'QUESTION 1' on the left, 'POINTS' in the middle (with a value of 5 and a small dropdown), and 'Delete Question' on the right. Below this is the question text: 'Algorithmic Complexity'. Underneath is a 'PROBLEM' section containing the text: 'What is the runtime complexity of binary search?' followed by five multiple-choice options: () $O(1)$, (X) $O(\log\{n\})$, () $O(n)$, () $O(n^2)$, and () $O(2^n)$. To the right of the question text is a dropdown menu with the following options: 'Insert Field', 'Short Answer', 'Free Response', 'Multiple Choice', and 'Select All'. At the bottom of the editor is a button labeled 'Add Subquestion'.

Short Answer

- [____](answer) creates a text input with the correct answer specified inside the parentheses
- Make sure to put the answer field on a separate line, with no text before or after it.
- For short answer questions with numerical answers, you can specify a correct answer like $=1+-0.1$ to allow students to give any numerical answer within that range (in this example, any answer between 0.9 and 1.1 would be marked as correct).

Free Response

- [____] denotes a free response text box
- Students can enter any text into these boxes
- Free-response boxes won't be auto-graded and must be graded manually.

Multiple Choice

- () description creates a choice
- (X) answer designates the correct answer among the choices
- Don't leave blank lines between choices, or it'll start a new group of choices

Select All

- [] description creates a choice
- [X] answer designates a correct answer among the choices
- Students must mark all required answers to get points

File Upload

- |files| denotes a File Upload field.
- This field gives students a button to upload any file type (PDFs, images, code) as part of their response.
- **Please note:** Unless students are submitting files that are already saved on the device they're using for the assignment, File Upload input fields are **not recommended for LockDown Browser assignments**. If you do want to use a File Upload field, see [Tips for file uploads](#) on the next page.

Tips for file uploads

File is already on the device being used: File Upload fields function the best if students will be uploading a file that they have previously saved on the device they're using to complete their assignment. In that case, students will simply need to click the **Select File** button on their screen > locate the file > click **Upload**.

File is not on the device being used: Because their browser will be locked down and most outside programs will be blocked, students will not be able to email or message themselves a file once they've started the assignment. If you want students to upload a file that they create during the assignment, they will need to share it from a mobile device to the device they're using to complete the assignment via a file-sharing service (e.g., **AirDrop**, **Google Drive**, **Dropbox**, etc.). Once the file is shared, they can click the **Select File** button on their screen > locate the file > click **Upload**. In this situation, we recommend having your student test out the process like this:

1. Have students write or draw on a sheet of paper.
2. Have students take a picture of the paper or use a scanning app to scan it from their phone.
3. Have students share the file from their phone to the device they'll be using via a file-sharing service.
4. Have students open the file directory on their device (e.g., Finder on Macs).
5. Have students confirm that they can locate the file from the file directory on their device.

Enabling LockDown Browser

1. Once you've created your timed Online Assignment, click on the assignment **Settings** link in your left side panel. This will take you to the **Settings** page for the assignment.
2. (Optional) Under **Questions and Student Work Visibility** select "Show after grades are published" to hide questions and students' responses after the time limit expires or the due date passes. Students will regain access once you click **Publish Grades**.
3. Next, select "Enable LockDown Browser Powered by Respondus."
4. Under **Calculator**, if you'd like, you can choose the type of calculator ("Basic" or "Scientific") that you'd like students to have on their screen while they work. Choose "Neither" if none is needed.
5. Under **Printing**, if you'd like, you can check "Enable printing" to give students a printer icon on their screen while they work that they can use to download and print their Online Assignment. Leave the box unchecked if this functionality is not needed.
6. Under **Add to blacklist**, type any tools or programs you do not want students to be able to access while working on their assignment. Under **Remove from blacklist**, type any tools or programs you do want students to be able to access. For both lists, be sure to separate your listed tools or programs with commas and include the correct platform extension (".exe" for Windows programs or ".app" for Mac programs).
7. Click the **Save** button when you're finished.

Blocklists: Most screen-capture, messaging, screen-sharing, note-taking, and network monitor apps are disabled by default, but if you want to allow any of them to run in the background (i.e., for students with screen readers), you can add them to the **Remove from blacklist** field. Though hundreds of programs are automatically disabled, if you wanted to ensure that students won't be able to access a program, you can enter it under the **Add to blacklist** field.

Submitting work for students

Resubmissions: In LockDown Browser, students **cannot resubmit and update their answers** once they submit their assignment or the timer runs out. If your student accidentally ends their assignment early or is unable to upload a file to a question, though, any instructor or TA in the course can update a student's answers or submit work on the student's behalf.

1. To update answers or submit on behalf of a student, first, open the assignment.
2. Click the left side panel to expand it (if it isn't already) and select **Manage Submissions**. This will take you to a list of submissions that have been made to this assignment so far.
3. Click the **New Submission** button at the bottom of the screen. This brings up the assignment questions.
4. Type or select the student's name from the dropdown under the assignment title. This will populate the answer fields with any existing answers your student submitted. If they haven't submitted any answers yet, then the fields will be blank.
5. Enter or select the responses your student has given you. Upload any of their documents to the appropriate Upload File fields. Click the **Save Answer** button as you complete each question. If your student had existing responses that you did not touch, those will be preserved.
6. When you're finished, click **Save All Answers**. Then click the **Submit & View Submission** button to see the work you submitted for your student.

Grading

Multiple choice, select all, and short answer

Student submissions for multiple choice, select all, and short answer questions will be graded automatically. Short answer questions require an exact match to be marked correct. You can enable options for making the matching case-insensitive and to remove leading/trailing whitespaces on the assignment's **Settings** page. If there are multiple input fields in one question, students must answer all of them correctly to receive any credit. If you change the correct answer and need to regrade all autograded questions, go the **Manage Submission** page and click **Regrade All Submissions**.

Free response and file uploads

If there are any free responses or file upload fields, you will need to grade those manually from the assignment's **Grade Submissions** page.

Publishing grades and feedback

Students won't see their feedback and scores until you publish grades. When you are finished grading any questions that needed to be manually graded, click **Publish Grades** on the **Review Grades** page.