LEVERAGING GRADESCOPE FOR PAPER-BASED HOMEWORK

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LAND ACKNOWLEDGEMENT

While we are coming together today in a virtual space, it is important to recognize the physical space that connects us and brings us together. The University of Guelph and its campuses are situated on the treaty lands of the Mississaugas of the Credit. We understand that these lands are connected by the Dish with One Spoon Wampum and continue to be home to diverse communities of First Nations, Inuit and Métis Peoples. By acknowledging the land, we reaffirm our commitment to decolonization and reconciliation with Indigenous peoples and our responsibility to the land on which we live, learn, and play.
TODAY’S AGENDA

• Overview of Gradescope Homework
  – Gradescope vs. CourseLink Dropbox
• Setting up
  – Access Gradescope
  – Link to CourseLink course
• Creating a Homework Assignment
  – Edit outline
  – Submission types
• Submission process
  – Student submission
  – Proxy submission by instructor or TA
• Assessment Process
• Review & Release Grades
• Support Options
• Question & Answer Period (optional)
OVERVIEW OF GRADESCOPE HOMEWORK
• Ideal for handwritten homework/take-home assignments
• Uploaded by students
GRADESCOPE HOMEWORK VS. COURSELINK DROPBOX

When deciding which to use, ask:

Do I prefer to mark by question? Yes

Do I prefer to mark by student? Yes

Is this a group assignment? Yes

Am I allowing regrade requests? Yes
**Gradescope Homework vs. CourseLink Dropbox**

When deciding which to use, ask:

What kind of files will I accept?

- Any
- JPEG or PDF

Would I like a time limit?
(Notice: This is different from due date)

- Yes

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**Gradescope** by Turnitin

**CourseLink**
University of Guelph

**OpenEd**
Open Learning and Educational Support
When deciding which to use, ask:

Am I interested in assignment statistics (e.g., question-level results, common errors, etc.)?  
Yes

Would I like the option of reusable comments?  
Yes

Would I like the ability to change rubric criteria mid-assessment and automatically apply those changes to all submissions?  
Yes

Would I like to leave audio or video feedback?  
Yes
## Gradescope vs. CourseLink Dropbox

- Otherwise, similar features:

<table>
<thead>
<tr>
<th>Gradescope Homework</th>
<th>CourseLink Dropbox</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release date</td>
<td>Start date</td>
</tr>
<tr>
<td>Due date</td>
<td>Due date</td>
</tr>
<tr>
<td>Late due date</td>
<td>Accept late submissions</td>
</tr>
<tr>
<td>Extensions</td>
<td>Special access</td>
</tr>
<tr>
<td>Rubrics, annotations &amp; comments</td>
<td>Rubrics, annotations &amp; comments</td>
</tr>
<tr>
<td>Connect to CourseLink Grades</td>
<td>Connect to CourseLink Grades</td>
</tr>
</tbody>
</table>
SETTING up: HOMEWORK
ACCESSING GRADESCOPE

- Gradescope can be accessed in two ways:
  1. Via the CourseLink Integration (Content tool)
  2. Directly via gradescope.ca using SSO
**CourseLink Integration (Recommended)**

- The CourseLink Integration allows you to:
  - **Connect** your course site to an **existing** Gradescope course/assignment or **create a new** Gradescope course/assignment
  - **Sync** your CourseLink “Classlist” to the Gradescope “Roster”
  - Automatically **create** grade items associated with the Gradescope assignment in CourseLink’s Grades tool
  - **Export** scores from Gradescope assignments to their associated CourseLink grade item
SETTING UP A HOMEWORK/PROBLEM SET
NOTE ON SUBMISSION TYPE

SUBMISSION TYPE

- Variable Length
  Students submit any number of pages and indicate the pages where their question responses are.

- Templated (Fixed Length)
  Students submit work where answers are in fixed locations (like worksheets).
Questions can be delivered anywhere - in class, through CourseLink, through Gradescope.

Students use as many pages as needed to answer the questions and either take pictures to submit for each question or upload a PDF and indicate which pages contain the answers to which questions.

**Long Handwritten Answer (13 marks)**

6. Two particles A and B are moving in the xy-plane. Particle A starts at the point \((11, 0)\) and moves along the x-axis toward the origin with the constant speed \(v\). Particle B starts at the point \((0, 6)\) and moves along the y-axis, away from the origin with the same speed \(v\). The rate of change of the distance between the two particles is equal to 5 units per minute at the moment when the distance between the two particles is equal to 13 units. Find the common speed \(v\) of the two particles.

7. A certain function \(y = f(x)\) satisfies \(f(1) = -1\), \(f'(1) = 2\).
   A) Determine an equation for the tangent line at \(x = 1\).
   B) Find the \(x\) and \(y\) intercepts of the tangent line.
   C) Graph the tangent line.
TEMPLATED (FIXED) LENGTH

- Hand out the worksheet in class/make the template downloadable for students.
- Students answer questions in space provided on worksheet.
- Students submit PDF of work.

Solve the equations below by factoring:
1. \( u^2 - 5u - 14 = 0 \Rightarrow \) __________
2. \( x^2 + 15x = 0 \Rightarrow \) __________
3. \( z^2 - 16z + 61 = 2z - 20 \Rightarrow \) __________
4. \( 12x^2 = 25x \Rightarrow \) __________
5. \( t^5 = 9t^3 \Rightarrow \) __________
**Recommendations when using the CourseLink Integration**

- **Hide** the content module or item until ready for students to access

![Gradescope](image)
RECOMMENDATIONS FOR WHEN USING THE COURSELINK INTEGRATION

• Go to **Manage Grades** after creating the assignment to hide the grade item Gradescope creates and adjust its max points value (defaults to 1)
  – If you are unsure of your max points value, come back and adjust when you know (before exporting)
Recommendations for when using the CourseLink integration

- If it is your first/only Gradescope assignment, be sure to access Gradescope and **sync the Roster with the Classlist**
  - If you do this early in the semester, you may want to re-sync closer to the assessment to ensure you have the most up-to-date roster on Gradescope.
**Demo #1**

- Setting up the CourseLink integration
- Setting up a new homework/problem set
  - **Variable length**
  - **Set release and due dates**
- Hiding the content module/content item
- Hiding the grade item/adjusting max points
- Accessing Gradescope from Content
- Importing the CourseLink Classlist to the Gradescope Roster
CREATING A HOMEWORK/PROBLEM SET

Note: We will focus on a 'variable length' assignment.
Chemistry Homework

Answer all questions. Use as many pages as needed.

1. Selenium, an element used in the manufacture of solar energy devices, forms an oxide that contains only one atom of selenium (per formula unit) and is 37.8% oxygen by mass. What is the molecular formula of the oxide?

2. A solution with a total volume of 1000.0 mL contains 37.1 g Mg(NO₃)₂. If you remove 20.0 mL of this solution and then dilute this 20.0 mL sample with water until the new volume equals 500.0 mL, what is the concentration of Mg²⁺ ions in the 500.0 mL of solution? What is the concentration of nitrate ions?

3. An iron nail is suspended on a thin wire in a sealed jar of moist air. The surface of the nail becomes red over time.
   a. Describe what is happening to the mass of the nail over time.
   b. List the chemical changes taking place in the jar.

• Presented with the PDF template uploaded during the creation phase
Edit the outline

- Add names (titles) for each question
  - Helps easily identify questions during grading
- Add point values for each question

Create questions and subquestions via the + buttons below. Reorder and indent questions by dragging them in the outline.
Demo #2

- Edit Homework outline
  - Add question names
  - Add point values
SUBMISSION PROCESS
STUDENT SUBMISSIONS

• Students can submit homework three ways:
  1. CourseLink integration
  2. gradescope.ca
  3. Gradescope mobile app

• If the assignment type is **variable**, students have two options to upload their assignment: submit images or submit PDF.
• If the assignment type is **templated**, students will only have the PDF submission option.
• Upon successful submission, students will receive a confirmation email.
STUDENT SUBMISSIONS: SUBMITTING IMAGES

- Students take pictures of their assignment and upload an image file(s) for each question.
- This submission option is only available for Variable Length assignments.
STUDENT SUBMISSIONS: SUBMITTING A PDF

• If the submission type is set to **Variable Length**, students are prompted to match each question to the corresponding page where the answer is found. If the submission type was **Templated (Fixed Length)**, students simply upload their PDF.
INSTRUCTOR SUBMISSION ON BEHALF OF A STUDENT

- Instructors and TAs have the option to submit assignments on behalf of students. This feature is useful in cases where students miss the submission date and email the instructor their files instead. Proxy submissions permit late uploads even when the assignment does not allow late submissions from students.
- On the Manage Submissions page, select the Upload Submission button at the bottom of the page.
INSTRUCTOR SUBMISSION ON BEHALF OF A STUDENT

- From there, choose the student from the drop-down menu, select their file from your computer, and click the **Upload** button.
ASSESSMENT PROCESS
GRADE SUBMISSIONS

- Designed to grade by question
- Option to enable anonymous grading
- Rubric grading system
  - Both positive and negative scoring rubrics are available
  - Can import a rubric from a previous assignment/question or build on the fly
  - Rubric items support Markdown and LaTeX
- Commenting and annotations are available
To begin grading, click on the name/number of the question you want to start with

Tip: Adding a question name during the Edit Outline phase makes it much easier to select the question for grading

Grading Dashboard

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: Molecular formula</td>
<td>1.0</td>
</tr>
<tr>
<td>2: Concentration of ion</td>
<td>1.0</td>
</tr>
<tr>
<td>3: Chemical changes</td>
<td>2.0</td>
</tr>
<tr>
<td>3.1: Moss</td>
<td>1.0</td>
</tr>
<tr>
<td>3.2: Changes</td>
<td>1.0</td>
</tr>
</tbody>
</table>
SELECT GRADING METHOD – INDIVIDUALLY OR USING ANSWER GROUPS

- **Note:** AI-assisted grading (answer groups) only works with templated assignments
BRIEF NOTE ON AI ASSISTED GRADING – ANSWER GROUPS

- AI attempts to categorize all answers
- You confirm the groups are accurate
- Option to provide a name (e.g., a group named “True”)
Grading with a Rubric

- Build entire rubric when you start grading or build on the fly
- Apply item by clicking on the number or using the number keys on your keyboard
- Entire grading team has access to rubric
- Next ungraded will take you to the next assignment needing an assessment
Can import a previously created rubric from any other course/assignment/question
ANNOTATIONS

- Freeform (pencil) and text options available
- Can associate rubric items with comments
- Can reuse comments
DEMO #3

• Grade Submissions
  – Grade Homework
    • Grading with a rubric
      – Adjust to positive/negative scoring
    • Commenting and annotation options
REVIEW & RELEASE GRADES
REVIEW GRADES

- Histogram of class results along with some basic statistics
- Below histogram is a sortable list of all students and their grades
• Easily view how students performed on each question compared to the assignment mean
• Pull out questions/topics for in-class review
• Statistics can be sorted by custom Tags you create!
• Can help to identify content or learning objectives where student performance differed greatly from the average
**EXPORTING GRADES TO COURSELINK**

- To send the scores from Gradescope to CourseLink, simply click the Post Grades to CourseLink button
  - Remember to ensure the max points of the grade item matches the score total for the homework assignment
  - If the grade item is hidden, students will not see their score or receive a notification
Publish Grades

- Provides students with access to their homework submission and the rubric items through Gradescope
- Once grades are published:
  - Indicator in top right corner says Grades Published
  - Bar at bottom now has option to Unpublish Grades
  - Option to Compose Email to Students to notify them
**Demo #4**

- Review grades
- View statistics
  - Toggle between ‘show questions’ and ‘show tags’
- Export grades to CourseLink
- Publish feedback for students
  - Send notification email to students
GRADESCOPE PROGRAMMING

Past Sessions (recordings and slides available):

• Get to Know Gradescope Series
• Introduction to Programming Assignments
• Prepare for Gradescope Bubble Sheets
• Gradescope for Assessment of On-Paper Assignments and Tests
• Transitioning from Crowdmark to Gradescope for On-Paper Assessments
**GRADESCOPE PROGRAMMING**

**Ongoing Sessions:**

- **Online Gradescope Drop-Ins** (via Zoom)
  - Tuesdays (10-11 am)
  - Wednesdays (2-3 pm)
- **Weekly Online Workshop** (Run by Gradescope)
  - Thursdays at noon

Visit our OpenEd support site for a complete list of W23 programming.
QUESTION AND ANSWER PERIOD