

UBC Faculty of Forestry & Environmental Stewardship

Using PrairieLearn for Adaptive Learning in Forestry Courses

PrairieLearn is an adaptive learning platform powered by machine learning algorithms. Compared to Canvas quizzes, PrairieLearn's primary advantage lies in its ability to present varied versions of a question to different students, allowing different practice opportunities (see the screenshot below). Additionally, the platform supports auto-grading for questions whose answers can be determined through equations, saving valuable time for teaching teams.



Note that PrairieLearn is not currently supported by UBC centrally, and may incur costs. If you have questions or would like a free trial in Forestry, please contact the Forestry Teaching & Learning Support Team at forestry.tls@ubc.ca. This tip-sheet is a preliminary guide to help teaching teams get acquainted with the platform.

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A. Getting Started

Requesting a Course/Sandbox Site

- Email forestry.tls@ubc.ca with the course code and title.
- We will coordinate with PrairieLearn to set it up for you. This process may take ~1 week.

Instructor & TA Access

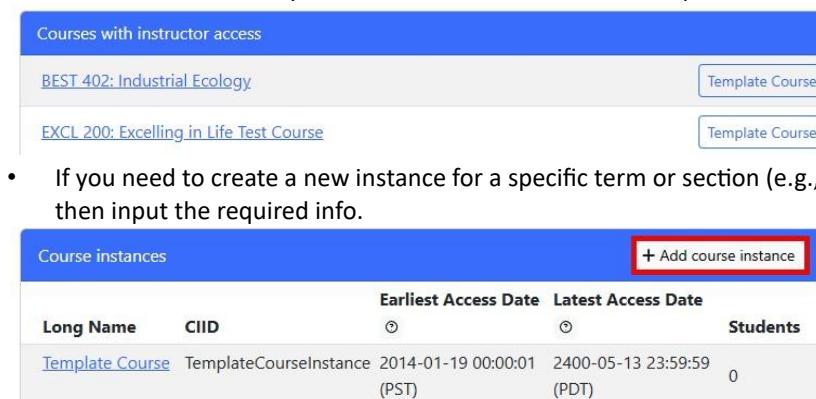
- Once the course site is created, we will add instructors and TAs using UBC CWL, and keep you posted.
- To log into PrairieLearn, visit <https://www.prairielearn.com/>, and choose **Main** under Login. Please do not click Canada as that portal no longer works. All course sites are now under the Main (i.e., U.S.) portal.



- Next, click **University of British Columbia (ubc.ca)** and you'll be directed to log in with your CWL.



- On the dashboard, you will be able to see the course(s) with instructor access. By clicking on the course title, you will go into the course site. By default, each course site has a Template Course instance for you to develop content.

A screenshot of the PrairieLearn dashboard. At the top, it says 'Courses with instructor access'. Below that is a table with two rows. The first row contains 'BEST 402: Industrial Ecology' and a 'Template Course' button. The second row contains 'EXCL 200: Excelling in Life Test Course' and a 'Template Course' button. Below the table is a section titled 'Course instances' with a '+ Add course instance' button. A red box highlights this button. The table below shows course instances with columns for 'Long Name', 'CLID', 'Earliest Access Date', 'Latest Access Date', and 'Students'. The first instance is 'Template Course' (CLID: TemplateCourseInstance) with 0 students.

- If you need to create a new instance for a specific term or section (e.g., 25 W1, Section 101), click '+ Add course instance', then input the required info.

A screenshot of the PrairieLearn dashboard showing the 'Course instances' table after a new instance has been added. The table now has three rows. The first row is the template course. The second row is for '25 W1, Section 101' with an 'Add' button. The third row is for '25 W1, Section 102' with an 'Add' button.

- If you need to remove or duplicate an instance (e.g., from the template or previous term), contact the TLS Team.

Student Access

- Since PrairieLearn is not currently integrated with Canvas, it's recommended that the teaching team add the PrairieLearn assessment links to their corresponding assignments on Canvas. From there, students will be directed to access PrairieLearn. See the example in Section C for more details.
- When students log into the course site on PrairieLearn with their CWL, they should be automatically added as students.

Planning for Creating Questions & Assessments

- PrairieLearn uses python and HTML for question and assessment setup. The TLS Team is happy to help convert existing Canvas quiz questions into PrairieLearn, or assist in developing new ones.
- The process of brainstorming, developing, and testing may take some time (e.g., 2–4 weeks), depending on question complexity and quantity.
- So, we recommend the teaching team planning ahead to allow sufficient time for setup and refinement.
- For more info, see Sections B and C below.

Notice for Syllabus/Announcement

- If you decide to use PrairieLearn in your course, consider informing students with a notice like this.

Assignments and assessments in this course involve the use of PrairieLearn, which is an advanced online problem-driven learning platform. Students need to log in to PrairieLearn through UBC CWL Authentication.

Personal information is collected under the authority of section 26(c) of the Freedom of Information and Protection of Privacy Act (FIPPA), and is used for accessing, managing, and evaluating course assignments and assessments. All data are stored and accessed securely as noted in PrairieLearn's privacy policy (<https://www.prairielearn.com/legal/privacy>).

Please be aware that the data will be retained outside of Canada, and stored in the United States.

If you have questions or concerns, please reach out to the teaching team.

B. Creating & Managing Questions

Question Types

- PrairieLearn supports a variety of dynamic question types, including multiple choice, numeric, formula-based, fill-in-the-blank, short-answer, coding, matrix, and interactive graph questions.
- Visit [this webpage for question templates and more info](#).

Question Components

- For each dynamic question in PrairieLearn, there are 2 main components: base and variants (see the example below).

Base:

A forester measures a tree with a diameter at breast height (DBH) of d cm. Using the species-specific equation for estimating tree volume: $V = k \times d^b$ where k and b are species-dependent coefficients.

Variants:

The tree species, DBH, and equation can be designed as variants. So, students will see questions like these:

- A Douglas-fir has a DBH of 42 cm. Given that $k=0.25$ and $b=1.8$, estimate the tree volume.
- A western red cedar has a DBH of 58 cm. Given that $k=0.30$ and $b=1.6$, estimate the tree volume. - etc.

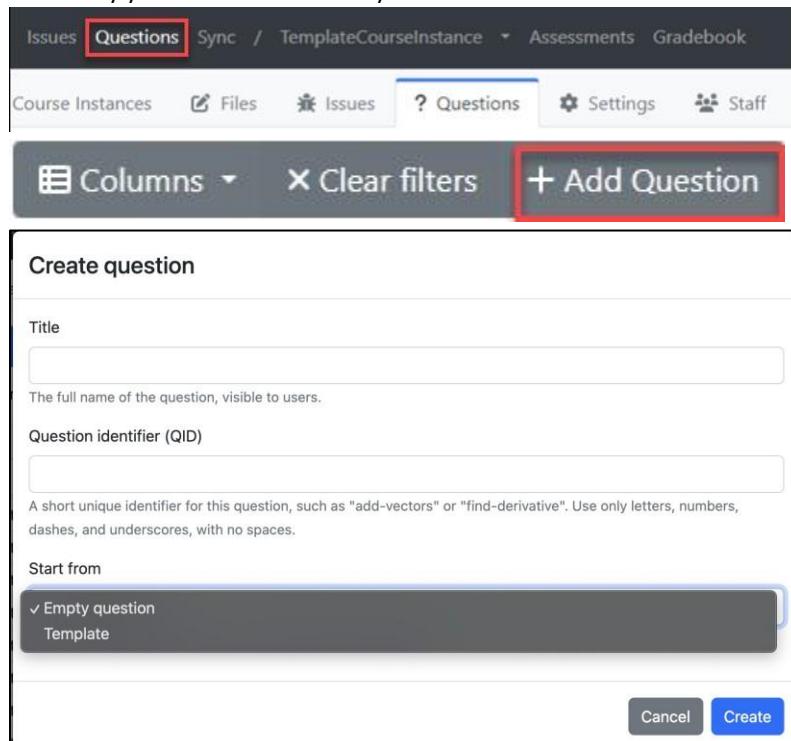
Migrating Questions from a Canvas Quiz to PrairieLearn

- Contact the TLS Team in advance for question migration.
- Note that the migrated questions will remain static (i.e., no variants) by default. The codes for these questions will be available for further editing in PrairieLearn.

- It'd be a good idea for teaching teams to review questions and design variants ahead of time (see example above).

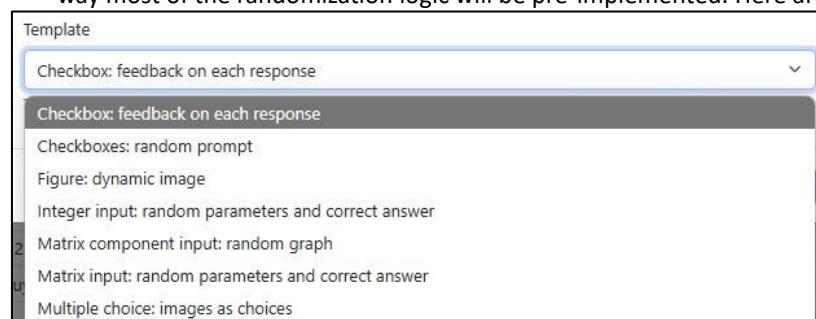
Developing New Questions

- The TLS team is happy to collaborate with the course's teaching team and create all questions and assessments beforehand. The teaching team can draft questions in a Word document, highlighting potential variants (e.g., numeric values, datasets, equations, maps, etc.).
- If needed, the TLS Team can help input the questions into PrairieLearn, incorporating coding for adaptability.
- The teaching team can review, test, and refine the questions as needed.
- We encourage the teaching team to practice setting up questions and get familiar with PrairieLearn to better support students. If the Instructors or TAs wish to make changes or add new questions, they can follow the steps given below.
- Click on the **Questions** tab, then **Add Question**. Provide a title, and a Unique ID (**QID**) for your question. PrairieLearn will notify you if the ID has already been used.



The screenshot shows the PrairieLearn interface. At the top, there are tabs for 'Issues', 'Questions' (which is highlighted with a red box), 'Sync', 'TemplateCourseInstance', 'Assessments', and 'Gradebook'. Below the tabs, there are navigation links for 'Course Instances', 'Files', 'Issues', 'Questions' (with a question mark icon), 'Settings', and 'Staff'. A toolbar below these includes 'Columns' (with a dropdown arrow), 'Clear filters' (with a 'X' icon), and a large red box highlighting the '+ Add Question' button. The main content area is titled 'Create question'. It contains fields for 'Title' (a text input box) and 'Question identifier (QID)' (another text input box). Below these fields is a dropdown menu titled 'Start from' with two options: 'Empty question' (selected, indicated by a checkmark) and 'Template'. At the bottom of the 'Create question' box are 'Cancel' and 'Create' buttons.

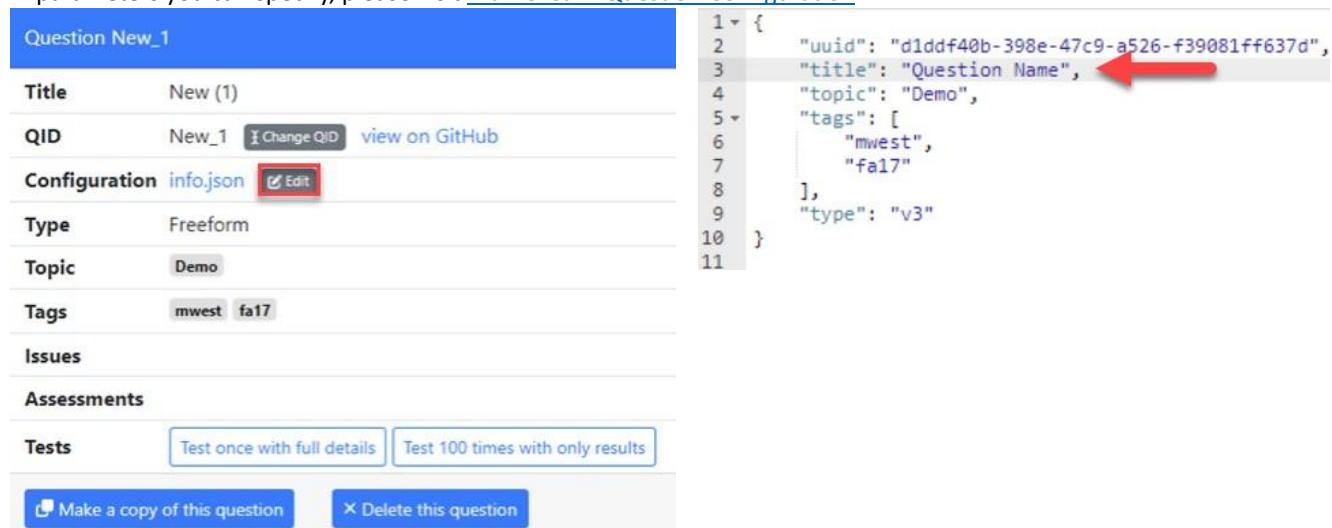
- Select whether you would like to start with an empty question or a **basic template**. The template provides a basic structure for the question.html and server.py files.
- Choose from the list of templates that aligns closest to the format of the question you would like to implement. This way most of the randomization logic will be pre-implemented. Here are the different template options:



The screenshot shows a dropdown menu titled 'Template'. The first item, 'Checkbox: feedback on each response', is highlighted with a blue selection bar. Below it is a list of other template options: 'Checkboxes: random prompt', 'Figure: dynamic image', 'Integer input: random parameters and correct answer', 'Matrix component input: random graph', 'Matrix input: random parameters and correct answer', and 'Multiple choice: images as choices'. Each option is preceded by a small number (1, 2, 3, 4, 5, 6) and a short description.

- To change the title of the question at any time, edit the **info.json** file. Then choose a new name for the question.

- You can also modify the number of attempts and variants in the info.json file. To learn more about the different parameters you can specify, please visit [PrairieLearn Question Configuration](#)



Question New_1

Title New (1)

QID New_1 [Change QID](#) [view on GitHub](#)

Configuration [info.json](#) [Edit](#) Edit

Type Freeform

Topic Demo

Tags mwest fa17

Issues

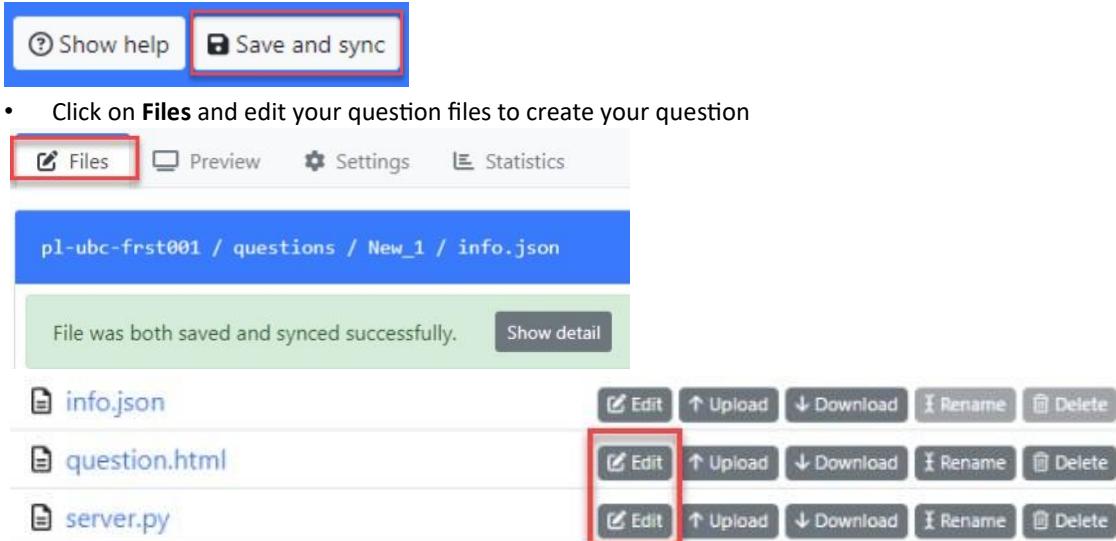
Assessments

Tests [Test once with full details](#) [Test 100 times with only results](#)

[Make a copy of this question](#) [Delete this question](#)

```
1 {  
2   "uuid": "d1ddf40b-398e-47c9-a526-f39081ff637d",  
3   "title": "Question Name", -----^  
4   "topic": "Demo",  
5   "tags": [  
6     "mwest",  
7     "fa17"  
8   ],  
9   "type": "v3"  
10 }  
11
```

- Note: Save your changes in any file by clicking **Save and sync**.



[Show help](#) Save and sync

Files [Preview](#) [Settings](#) [Statistics](#)

pl-ubc-frst001 / questions / New_1 / info.json

File was both saved and synced successfully. [Show detail](#)

	Edit	Upload	Download	Rename	Delete
info.json	Edit	Upload	Download	Rename	Delete
question.html	Edit	Upload	Download	Rename	Delete
server.py	Edit	Upload	Download	Rename	Delete

- The **question.html** file is a simple template where you create your question for students to see, using regular HTML with some special features like variables, input elements, Markdown for formatting, and LaTeX for equations.
- The **server.py** file, written in Python, generates different versions of the question by randomizing parameters and determining correct answers. It also handles the final preparation of the question, renders HTML output, parses student responses, and grades those responses based on specified criteria.
- The **server.py** file is also responsible for the question's Variants. Each time a question is loaded, it will populate it with sets of information pulled from the server.py file. This means that each attempt should produce a new **variant** that expands the utility of the question for practice or assessment.
- Server.py is the behind-the-scenes for a question. The [Elements for Writing Questions Guide](#) includes many examples of both templates and server files to use and edit.
- To view and test the question, click on **Preview**.

The screenshot shows the PrairieLearn interface with the 'Preview' tab highlighted in red. The main content area displays the path 'pl-ubc-frst001 / questions / New_1 / info.json'. Below this, a green box shows the message 'File was both saved and synced successfully.' with a 'Show detail' button.

- Click on **Save & Grade** to evaluate the answer. Click on **New variant** to load a different variation of the question.
- For a full breakdown on creating PrairieLearn questions, check out the [Question Configuration Guide](#). Explore the [Elements for Writing Questions Guide](#) for all the question types available as well as samples for each.

C. Creating & Managing Assessments

Once the required questions are created, the teaching team can set up and manage assessments.

Assessment Types

- PrairieLearn offers 2 main types of assessments: Homework and Exam. Here is a table summarizing the main differences:

Homework	Exam
Multiple variants	Single variant
Unlimited attempts	Limited attempts, possibly with decreasing points
Rewards repeated correct answers	Incentivizes a correct answer as early as possible
Fixed order	Shuffled order within question groups by default
Automatic feedback is always enabled	Automatic feedback can be disabled

Setting Up Assessment

- In order to set up an Assessment on PrairieLearn, you will have to first navigate to the assessments tab in your course and click on "Add Assessment"

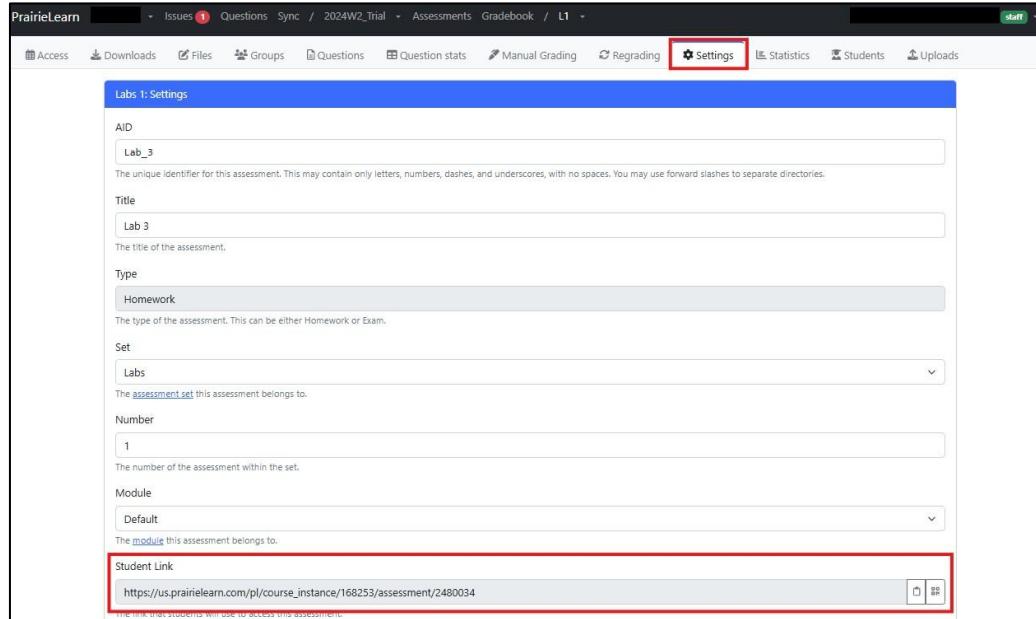
The screenshot shows the PrairieLearn interface with the 'Assessments' tab highlighted in red. The top navigation bar shows 'PrairieLearn', 'Issues 1', 'Questions', 'Sync', 'TemplateCourseInstance', 'Assessments', 'Gradebook', and a 'staff' dropdown. Below the navigation bar, there are links for 'Access', 'Assessments' (highlighted in red), 'Files', 'Gradebook', 'LTI', and 'Settings'. The main content area shows the 'Assessments' tab selected, with a red box highlighting the '+ Add assessment' button.

- Similar to question configuration, you will need to specify an assessment title, a unique Assessment ID (**AID**) and specify what type of assessment you would like to create this as. You can also specify which set you would like this assessment to belong to.
- Once the assessment is created, you can navigate to infoAssessment.json file and specify which questions you would like to include in this assessment. For more information on the different parameters you can specify in this file, please visit [PrairieLearn Assessment Configuration](#). Below is an example of a fully configured assessment:

```
{
  "uuid": "0221d22b-974e-48aa-889e-086aefa9ccf1",
  "type": "Homework",
  "title": "Lab 3",
  "set": "Labs",
  "number": "1",
  "allowAccess": [
    {
      "startDate": "2025-01-29T08:00:00",
      "endDate": "2025-02-07T23:59:59",
      "showClosedAssessment": true
    },
    {
      "uids": [
        "1234567890"
      ],
      "startDate": "2025-02-10T08:00:00",
      "endDate": "2025-02-10T23:59:59",
      "showClosedAssessment": true
    }
  ],
  "zones": [
    {
      "questions": [
        {"id": "Lab3Q1", "autoPoints": 30, "triesPerVariant": 100},
        {"id": "Lab3Q2", "autoPoints": 18, "triesPerVariant": 100},
        {"id": "Lab3Q3", "autoPoints": 32, "manualPoints": 20, "triesPerVariant": 100}
      ]
    }
  ]
}
```

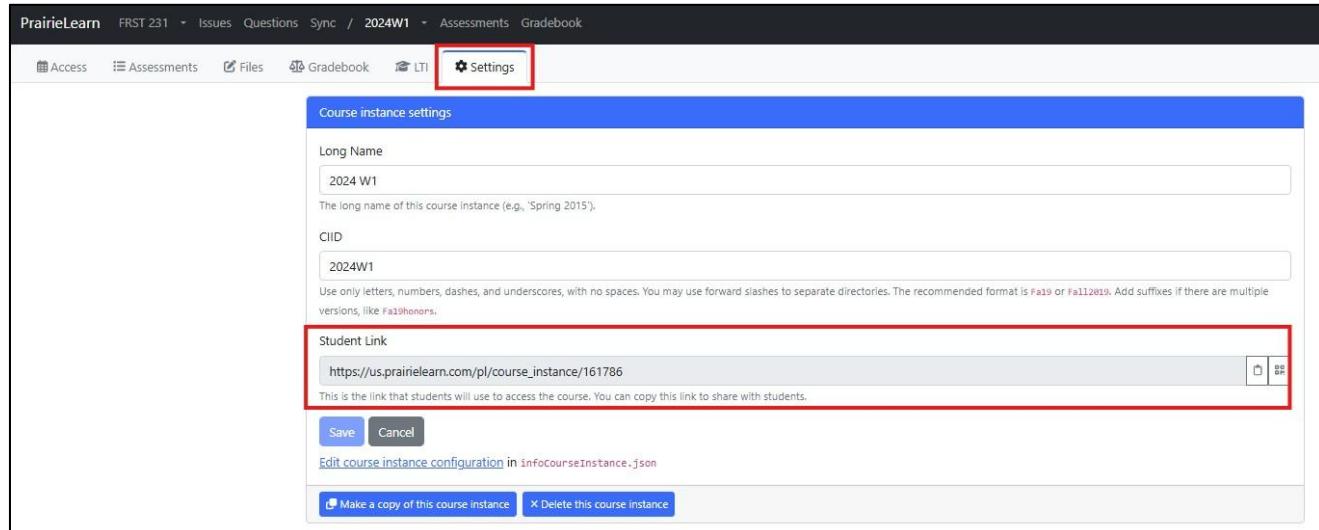
Adding Assessment Link to Canvas

- Assessment links can be copied from PrairieLearn to provide direct access from the Canvas page for students. This Assessment link can be copied from “Settings” tab under any of the assessment.



The screenshot shows the 'Settings' tab for an assessment titled 'Lab 3'. The 'Student Link' field is highlighted with a red box and contains the URL https://us.prairielearn.com/pl/course_instance/168253/assessment/2480034.

- Alternatively, you can provide the general student link from the **course instance** level settings tab and instruct the students to navigate to the correct assessment.



The screenshot shows the 'Course instance settings' page in PrairieLearn. The 'Settings' tab is highlighted with a red box. The 'Student Link' field, which contains the URL https://us.prairilearn.com/pl/course_instance/161786, is also highlighted with a red box. Other visible fields include 'Long Name' (2024 W1) and 'CID' (2024W1). Buttons at the bottom include 'Save' and 'Cancel', and links to 'Edit course instance configuration' and 'infoCourseInstance.json'.

Lab 3 - Instructions and submission

Published Assign To Edit ⋮

1. This assignment with the instructions below does not require a submission and is here as a placeholder. Labs 1 to 5 are submitted directly via PrairieLearn and we will import grades here later.

Please note that PrairieLearn lab assignments will be released on the week they take place in the classroom, so if you don't have access to the links below, the lab is likely not available yet. Otherwise, follow these steps:

1. Go to the [Assessments](#) page in PrairieLearn and click on **Lab 3** and then again on the link that you see under the **Question** title to see the questions that you have to work on. Remember that every student will have a different set of numbers in all questions, so there will not be two answers that are identical in the entire class.
2. Solve the questions by hand on a blank sheet of paper. Do it neatly because you may require to upload a **JPG** image of some of our answers or procedures when indicated.
3. Enter your answers via the site described in step 1 above. You can click on the **Save only** button at the bottom of the page at any point so you don't have to submit the assignment in one sitting (be careful not to click on the **Save & Grade** button but if you do, no problem, you can use another attempt to complete it). Enter numerical questions directly on the boxes provided. For questions requiring a **JPG upload**, simply take a picture of the procedures or graphics for that question only and **name it exactly as PrairieLearn indicates** as shown on the example below.

Managing Assessment Availability

- In the `infoAssessment.json` file, the start and end dates and time in the box in the image below **must be edited by the teaching team** prior to the assessment start date to ensure the students have access to the assessment. If you have any questions or require clarification, please feel free to contact us.

```
1  {
2    "uuid": "76322f64-0638-4572-b657-f4e1bbb54255",
3    "type": "Homework",
4    "title": "Lab 5",
5    "set": "Labs",
6    "number": "5",
7    "allowAccess": [
8      {
9        "startDate": "2025-02-24T08:00:00",
10       "endDate": "2025-03-28T23:59:59"
11     },
12   ],
13   "zones": [
14     "questions": [
15       {"id": "Lab5Q1", "autoPoints": 13, "triesPerVariant": 100},
16       {"id": "Lab5Q2", "autoPoints": 5, "triesPerVariant": 100},
17       {"id": "Lab5Q3", "autoPoints": 3, "triesPerVariant": 100},
18       {"id": "Lab5Q4", "autoPoints": 3, "triesPerVariant": 100},
19       {"id": "Lab5Q5", "autoPoints": 1, "triesPerVariant": 100},
20       {"id": "Lab5Q6", "autoPoints": 5, "triesPerVariant": 100}]]
```

Granting Extensions

- To accommodate certain students with an extended deadline for their assessment, please update the infoAssessment.json file as follows:
- **Add the extended deadline:** Include the new deadline in addition to the existing one.
- **Specify CWLs:** List the Campus-Wide Logins (CWLs) of the students who are granted the extension under the uids field.
- With these modifications, the specified students will have until the extended deadline to submit their assessments, while all other students must adhere to the original end date.

```
1  {
2    "uuid": "63e27a30-29eb-44c3-994d-239dadbd7b7",
3    "type": "Homework",
4    "title": "Lab 4",
5    "set": "Labs",
6    "number": "1",
7    "allowAccess": [
8      {
9        "uids": ["CWL@ubc.ca"],
10       "startDate": "2024-10-08T08:00:00",
11       "endDate": "2024-10-25T23:59:59"
12     },
13     {
14       "startDate": "2024-10-07T08:00:00",
15       "endDate": "2024-10-18T23:59:59"
16     },
17   ],
18   "zones": [
19     "questions": [
20       {"id": "Lab4Q1", "autoPoints": 8, "triesPerVariant": 100},
21       {"id": "Lab4Q2", "autoPoints": 30, "triesPerVariant": 100},
22       {"id": "Lab4Q3", "autoPoints": 10, "triesPerVariant": 100},
23       {"id": "Lab4Q4", "autoPoints": 18, "triesPerVariant": 100},
24       {"id": "Lab4Q5", "autoPoints": 8, "triesPerVariant": 100},
25       {"id": "Lab4Q6", "autoPoints": 8, "triesPerVariant": 100},
26       {"id": "Lab4Q7", "autoPoints": 18, "triesPerVariant": 100}]]
```

- In this example, any students specified under "uids" will have a deadline until 25th October, and everyone else will have a deadline till 18th October.

Submission with Late Penalty

- In order to allow students to submit an assessment after the deadline, but with a penalty, you can include a “credit” attribute to the Access control in infoAssessment.json. [Here is an example implementing this feature](#)

D. Grading Feedback & Analytics

Grading Options

- Prairielearn offers the option to automatically grade as well as manually grade responses submitted by the students. It is only possible to grade multiple choice and numerical responses submitted. **Any handwritten, descriptive or pictorial responses must be graded manually.**

Automatic Grading

- Questions must be specified as auto or manual graded while configuring the assessment under infoAssessment.json. Here is also where you specify how many points are awarded for a correct auto graded answer. For more information, please visit [Question specification under infoAssessment.json](#).

Manual Grading

- From your course’s Assessment Page, click on the assessment that you would like to manually grade:

Lab Handouts	AID
LH1 Sample Lab Handout	New_1
Homeworks	
HW1 Lab 1 & 2	lab_1
HW2 Lab 2	Lab_2
HW3 Lab 3	Lab_3
HW4 Lab 4	Lab_4
HW5 Lab 5	Lab_5

- Select “Manual Grading” from the top Menu bar

- Access
- Downloads
- Files
- Groups
- Questions
- Question stats
- Manual Grading**

- Select the question that you would like to grade

Homework 1: Manual Grading Queue

Question	QID	Auto Points	Manual Points	Submissions to grade	Grading assigned to	Graded by	Actions
1. Lab 1 & 2	Lab1Q1	8	8	1 / 1	(1 unassigned)		Grade next submission

[← Back to Homework 1 Overview](#)

lab_1 / Question 1. Lab 1 & 2

Columns Refresh Auto Refresh Show student info Tag for grading

Instance	Name	UID	Grading status	Assigned grader	Auto points	Manual points	Percentage score	Graded by
Instance 1 !	Kumaravendhan Ravichandran	kravicha@ubc.ca	Requires grading	—	0 / 8 [+1]	0 / 8 [+1]	0% [!]	—

- Select the **instance** of the student's attempt that you would like to grade
- On the right-hand side of the page, you will find a **Rubric pane**, click on the Rubric button to adjust the rubric for manually graded questions. Auto-points awarded by the auto grader can also be edited here at the grader's discretion.

Grading

Points Percentage

Manual Points: 0 / 8 Rubric

1 Draw histogram [+1]
 2 Histogram has correct bin height [+2]
 3 Draw frequency polygon line graph [+1]
 4 Frequency polygon has correct y axis [+1]
 5 Histogram is poorly drawn [-0.5]

Adjustment:

Auto Points: 0 / 8 Edit

Total Points: 0 / 16

Feedback:

Markdown formatting, such as `*emphasis*` or `code`, is permitted and will be used to format the feedback when presented to the student.

[← Back to Question](#) Submit Skip

- Once you have started manual grading for an assessment, you can find the student's name under **“Student details”**.

Questions 1 (Lab 1) & 2 (Lab 2)

LAB 1

Question 1. A lumber sawmill in British Columbia had a very prosperous year. The following observations represent the number of hours of employee overtime required to meet consumer demand for each of the last 50 weeks (the data has been sorted from low to high).

42.3	45.4	53.5	58.3	60.6	63	66.4	67.7	70.8	81.7
42.6	50.3	54.8	58.7	61	64.3	66.4	67.8	71.7	86.2
42.8	51.4	55.8	59.1	61.4	65.6	66.5	67.9	73.4	88.8
44.3	51.5	56	59.2	62.6	65.8	67.2	69.4	73.5	88.8
44.5	53.2	58.1	60.5	63	66	67.5	70.3	73.6	99.3

a) Based on the numbers above, use the boxes below to enter:

- Range (R) (1 decimal): 57.0 ? ✓ 100%
- Number of classes (c) according to Sturge's rule (no decimals): 7 ? ✓ 100%
- Class width (no decimals): 9 ? ✓ 100%

b) Complete the frequency distribution table below based on the observations above. Use the lowest value from the data above to establish your starting point (SP).

SP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
----	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Grading

Points Percentage

Manual Points: 78 / 78

Auto Points: 122 / 122 ?

Total Points: 200 / 200

Feedback:
Good job!

Markdown formatting, such as `*emphasis*` or `code`, is permitted and will be used to format the feedback when presented to the student.

[Back to Question](#) [Submit](#) [Skip](#)

- When you need to compare your feedbacks after manual grading, you can go to Assessment -> Manual Grading and click on "Show student info". Here, you can see the students' name, whether or not the assessment has been graded and who graded the assessment. This should make it easier for you to navigate through assessments that have already been graded.

Access Downloads Files Groups Questions Question stats Manual Grading Regrading Settings Statistics

Students Uploads

This assessment currently has 30 open instances. Please ensure all students have completed their assessments before grading. You may close all open instances on the [Students tab](#).

[Back to Labs 1 Overview](#)

Lab1_2 / Question 1. Questions 1 (Lab 1) & 2 (Lab 2)

Instance	Name	UID	Grading status	Assigned grader	Auto points	Manual points	Percentage score	Graded by
Instance 1 ⚠			Graded	—	113.29 / 122 ?	62 / 78 ?	<div style="width: 87%;">87%</div>	
Instance 2 ⚠			Graded	—	0 / 122 ?	2 / 78 ?	<div style="width: 1%;">1%</div>	
Instance 3 ⚠			Graded	—	122 / 122 ?	72 / 78 ?	<div style="width: 97%;">97%</div>	
Instance 4 ⚠			Graded	—	122 / 122 ?	78 / 78 ?	<div style="width: 100%;">100%</div>	
Instance 5 ⚠			Graded	—	0 / 122 ?	2 / 78 ?	<div style="width: 1%;">1%</div>	
Instance 6 ⚠			Graded	—	122 / 122 ?	73.5 / 78 ?	<div style="width: 97%;">97%</div>	

- Questions can be manually graded with **Grader's Notes** that will only be visible to the grader at the time of grading. This can be added while creating the questions. Refer to [Question Configuration Guide](#) and [Elements for Writing Questions Guide](#) for more information.

l) Does the mode from raw data mean much in a dataset like this? Why or why not? Answer in a very short sentence.

Grader Notes: No, mode from raw data is useless

m) Based on the analysis of this data and assuming that demand remains constant in the upcoming years, what would you do as a manager of the mill?

Grader Notes: No correct answer ... One possibility is that more staff (an additional shift) is required to keep up with demand. The solution should include some of the statistics computed in the lab. For example, an average of 54.69 hours is equivalent to more than one person-day.

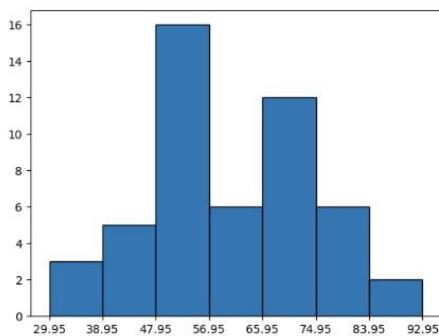
- Wherever necessary, hand-drawn graphs by the students can be compared to a computer-generated graph specific to the student's attempt for grading. Clicking on "Show Preview" will display a preview of the student's graph.

c) [JPG submission] Draw a histogram that illustrates the frequency distribution above. Don't forget to include axis labels and units.

Files

Histogram.jpg
uploaded

[Download](#) [Show preview](#)



Resolving Errors reported by Students

- Students can report errors in assignment and quiz questions when they attempt it.

Question HW4.2

Submission status: **unanswered**

Best submission: —

All variants: **Open**

Total points: — /3

Auto-graded question

Report an error in this question

- These errors will appear on the instructors' end as an "Issue".

Log Broker

A log broker carries 35 species of wood; 19 are softwoods, 16 are hardwoods. If a buyer randomly selects 3 species, find the following probabilities:

a) P (1 softwoods, 2 hardwoods)
 $P =$ number (2 significant figures)

b) P (all hardwoods)
 $P =$ number (2 significant figures)

c) P (all softwoods)
 $P =$ number (2 significant figures)

- The teaching team can then review the error reported and resolve it at their discretion. For additional help on troubleshooting the errors, please contact the TLS team.

! [Lab4Q2](#) (instructor view, student view, manual grading, assessment details)

"Test Error"

#229409 reported 2 minutes ago by Kumaravendhan Ravichandran (kravicha@ubc.ca)

Manually reported

HW4

New_1

Releasing Grades

- To allow students to see their attempt and feedback after the assessment is closed, you will need to specify another json parameter **"showClosedAssessment"** : true.
- If you would like to release the grades only after all assessments are graded, you can add another json parameter **"showClosedAssessmentScore"** : false.

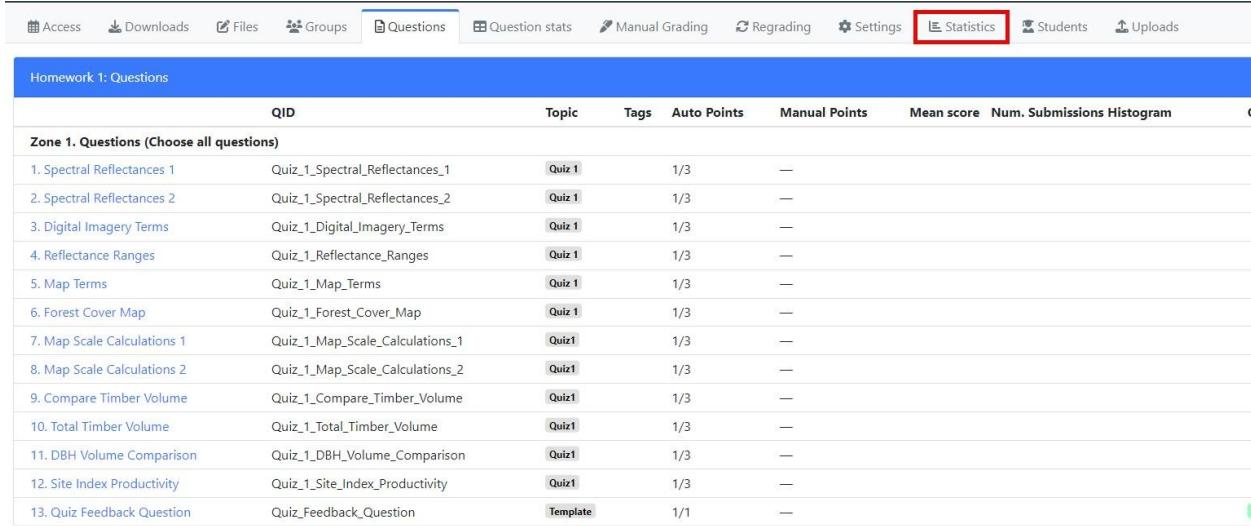
```
{
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  "title": "Lab 1 & 2",
  "set": "Labs",
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      "endDate": "2025-01-31T23:59:59"
    }
  ],
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    "startDate": "2025-01-08T08:00:00",
    "endDate": "2025-02-03T23:59:59"
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  {
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    "showClosedAssessmentScore": false
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          "autoPoints": 122,
          "manualPoints": 78
        }
      ]
    }
  ]
}
```

Transferring Grades to Canvas

- Since PrairieLearn does not automatically sync grades with Canvas, it's recommended that the teaching team manually transfer grades to the Canvas Gradebook after grading is complete.
- For large courses, if you need help, please contact the TLS Team in advance.

Assessment Statistics

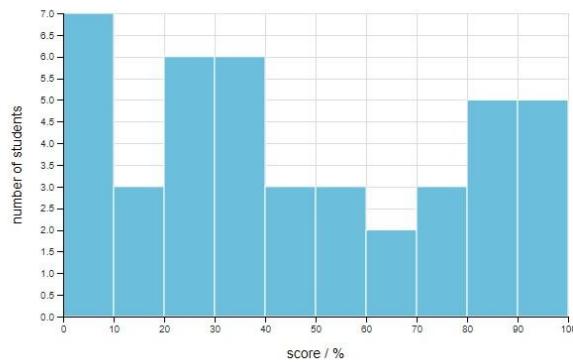
- Click on “Statistics” on the top Menu bar for an assessment



QID	Topic	Tags	Auto Points	Manual Points	Mean score	Num. Submissions	Histogram
Zone 1. Questions (Choose all questions)							
1. Spectral Reflectances 1	Quiz_1_Spectral_Reflectances_1	Quiz 1	1/3	—			
2. Spectral Reflectances 2	Quiz_1_Spectral_Reflectances_2	Quiz 1	1/3	—			
3. Digital Imagery Terms	Quiz_1_Digital_Imagery_Terms	Quiz 1	1/3	—			
4. Reflectance Ranges	Quiz_1_Reflectance_Ranges	Quiz 1	1/3	—			
5. Map Terms	Quiz_1_Map_Terms	Quiz 1	1/3	—			
6. Forest Cover Map	Quiz_1_Forest_Cover_Map	Quiz 1	1/3	—			
7. Map Scale Calculations 1	Quiz_1_Map_Scale_Calculations_1	Quiz 1	1/3	—			
8. Map Scale Calculations 2	Quiz_1_Map_Scale_Calculations_2	Quiz 1	1/3	—			
9. Compare Timber Volume	Quiz_1_Compare_Timber_Volume	Quiz 1	1/3	—			
10. Total Timber Volume	Quiz_1_Total_Timber_Volume	Quiz 1	1/3	—			
11. DBH Volume Comparison	Quiz_1_DBH_Volume_Comparison	Quiz 1	1/3	—			
12. Site Index Productivity	Quiz_1_Site_Index_Productivity	Quiz 1	1/3	—			
13. Quiz Feedback Question	Quiz_Feedback_Question	Template	1/1	—			

- This page displays the summary statistics for a particular assessment, including the students' overall average, median, etc. A **CSV file** of this data can be obtained by clicking on the link displayed at the bottom of the page

Homework 1: Score statistics



Number of students	43
Mean score	46%
Standard deviation	32%
Median score	39%
Minimum score	0%
Maximum score	100%
Number of 0%	3 (7% of class)
Number of 100%	2 (5% of class)

Download [RST_239_TemplateCourseInstance_HW1_score_stats.csv](#) Data outside of the plotted range is included in the last bin.