



September 14-15

<https://wheel.ucdavis.edu/joinSITT>

The “beta” on Gradescope’s new multi-version feature: how to create and grade assessments with multiple versions (and save time along the way!)

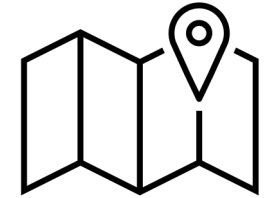
Miriam Markum, PhD

Microbiology & Molecular Genetics

SITT 2023



Overview

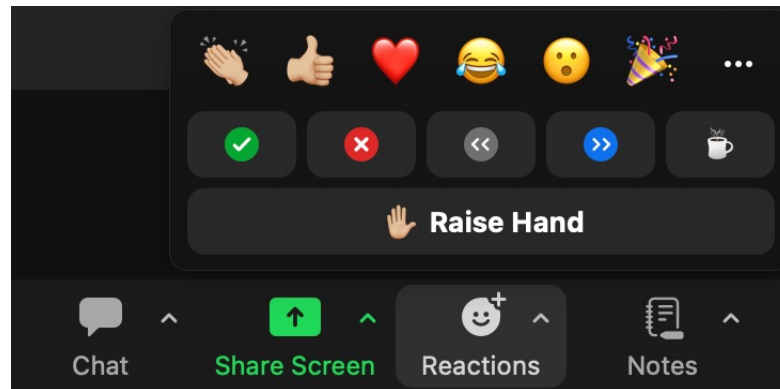


- Brief introduction to Gradescope and the Multi-Version Assignment feature
- Strengths & weakness Multi-Version feature
- How-to instructions with time-saving tips
- Q & A & share-outs



Reactions poll:

Select “Raise Hand” if you have used Gradescope



What is Gradescope?



- Grading software that enables fast, consistent, flexible scoring
- Supported assignment types
 - Exams/Quizzes
 - Homework/Problem sets
 - Bubble sheets
 - Programming assignments
 - Online
- Student work is uploaded by either the student or instructional team into the software
- Simultaneous grading by grading team +/- AI



Chat prompt:

If you have used Gradescope, please share in the Chat what type of classroom assignment(s) you have used it for



sequences were isolated from the same individual due to the high

Full Page Question Only

A. Does the resultant phylogenetic tree (shown below) support or refute the hypothesis that the woman was infected with HIV by the doctor?

Support
 Refute
 Need more information

B. Explain your answer.

The victim's genome are more closely related to the doctor's patient. The tree shows a more common ancestor between them.

Responses are presented from one question at a time

23: A woman with HIV

Total Points
6.0 / 6.0 pts

Expand View

1	+6.0	Correct: Support; HIV genome seqs isola...
2	+6.0	Support: The genomes share a common ...
3	+3.0	Support: the two genomes are closely re...
4	+4.0	Correct explanation but selected "Refute..."
5	+0.0	Incorrect or unanswered

+ Add Rubric Item Create Group Import...

Submission Specific Adjustments

Point Adjustment 0

Provide Comments Specific To This Submission

Apply Previously Used Comments

Page 10 of 12

All Pages

Submission: 2 of 177

Previous Ungraded Previous Next Next Ungraded

Rubric items are highly editable (text, points, pos/neg scoring, order)

Rubric items can be created *de novo* or imported

Comments can be type & re-used

Submissions are easy to navigate



Problem: what if you have multiple versions of an assignment?

Need to manage each version as an individual assignment

- Download/sync grades from each version independently
- Review regrade requests independently for each version
- No way to quickly identify students that lack a submission

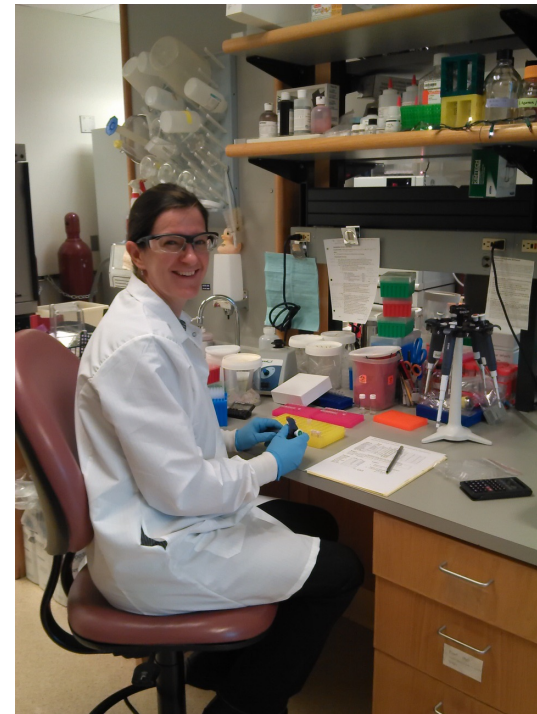


Solution: Multi-Version Assignments feature

- Allows you to group multiple versions of the Assignment into an Exam Version Set
 - Download grades, publish/unpublish grades, manage regrade requests for all included versions as a set
 - All exam scores in the set synced with the same Canvas grade item
- Available for Exam or Homework Assignments that are instructor-uploaded (not student-uploaded)
- Different versions can have different # of questions, different content

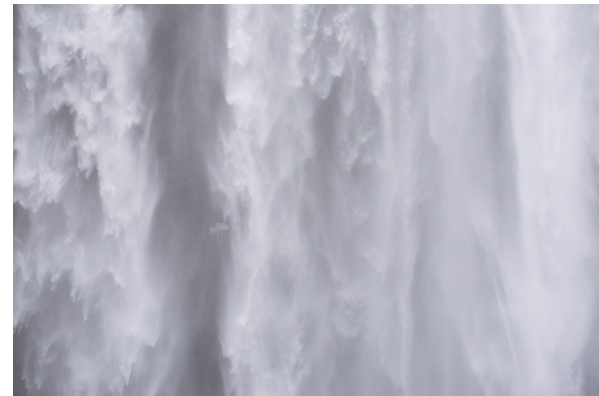


I decided to experiment with Gradescope Multi-Version Assignments feature in Spring 2023



Limitations of the Multi-Version Assignment feature

- Not (yet?) possible to map a specific question from one version to another version (e.g., for merged grading or question stats)
- Not (yet?) possible to copy/import a set of question rubrics into multiple versions at once (must import rubric items question-by-question, version-by-version)



How to set up a multi-version assignment

- Create your assignment forms; save as pdf



Time-saving tip: Name each Assignment with the version

- Create an assignment
 - Type: Exam/Quiz
 - Name (include version identifier)
 - Upload pdf template
 - Instructor upload



Create Assignment

Your Course
Welcome to
Click on one
to the right,
Account me

Gradescope

Advanced Grade Features

- Dashboard
- Assignment
- Roster
- Extensions
- Course Settings

Instructor

Miriam Mar

Account

1 Assignment Type

✓ Assignment Type

2 Assignment Settings

< Exit

< Go Back

Gradescope Ba

Exam / Quiz

Homework /

Institutional Tr

Bubble Shee

Programmin
Assignment

Online Assig

Assignment Type

Exam / Quiz

* Required fields

Assignment Name *

Example multi-version exam vA

Template *

MIC 102 SQ23 Final Exam vA.pdf

Select PDF

Submission Anonymization

Enable anonymous grading

Hide identifiable student information from being listed with submissions.

Who will Upload Submissions?

Instructor Student


Create your Rubric

Before student submission

While grading submissions



Create Name Region and ID Region



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Example multi-version exam vA

Version A

- Edit Outline
- Create Rubric
- Manage Scans
- Manage Submissions
- Grade Submissions
- Review Grades

✕ Name Region
✕ ID Region

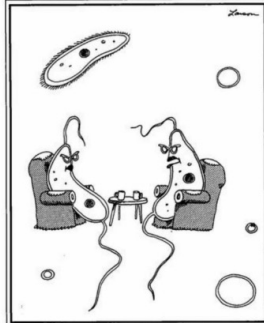
NAME (as in Canvas, all caps) _____
Student ID _____

MIC 102 Final Exam (125 pts)

Please read these instructions prior to beginning the exam.

→ Write your NAME and ID number at the top of every page.

- This is version A. Confirm that there are 12 pages.
- Use pencils with dark lead or pens with dark ink. Fill in the bubbles completely and cleanly (i.e., don't make extra marks near the bubble area). Completely remove erasure marks.
- Select the best available option as your answer unless otherwise indicated.
- You may use a calculator and the 1-page hand-written reference sheet that you created. There is a codon chart, metabolism map, and place to indicate ambiguous questions/answers on the last page. You may tear off the last page to use as a reference.
- Check the board/projector screen for clarifications/changes.
- You have 120 minutes to complete this form.



He told you that? Well, he's pulling your flagellum, Nancy.

Remember: You are responsible for your academic conduct.

Instances of copying from or helping another student on the Individual Exam, using unauthorized materials, altering the exam, etc, will be reported to the Office of Student Support and Judicial Affairs, result in a score of zero pts, and may lead to expulsion from the university.

Outline for Example multi-version exam vA

2 points total

✎ Edit Name Region
✎ Edit ID Region

Create questions and subquestions via the + buttons below, or by dragging boxes on the template. Reorder and indent questions by dragging them in the outline.

#	Title	Points
1	B Bacteria	1
2	The Wrinkled Peach	1

[+ New Question](#)

Cancel
Save Outline



Create question boxes for each gradable unit

1. (2 pt each) Match each set of features with the microbe it best describes.

1.1: B
1.2: D

_____ No cell wall, amoeboid motility, in the domain Eukarya

_____ Ancestral cell gave rise to eukaryotic progenitor, monolayer membrane

_____ Nonmotile, outer layer is membrane, has no proton motive force

_____ Multicellular, pro-inflammatory, performs sexual and asexual reproduction

_____ Buds during replication, genome encodes RNA-dependent DNA polymerase

_____ Fixes nitrogen, 70S ribosomes, phospholipids have ester linkages

_____ Performs co-transcriptional translation, not sensitive to antibiotics

2. (5 pts) The Wrinkled Peach mushroom is considered one of the most beautiful mushrooms and plays a major role in the decomposition of fallen elm trees. Sadly, it is undergoing rapid population loss due to infection by a family of gram-negative bacteria. Fortunately, competition from naturally-occurring gram-positive bacteria on the surface of the fungi has kept the fungus from going extinct. Scientists want to design an antibiotic treatment to protect the Wrinkled Peach from gram-negative bacterial infection while preserving the beneficial gram-positive bacteria. *[Based on a student-submitted question]*

Which of the following would be a good target for the treatment? Select all that apply.

2: The Wrinkled Peach (5 points)

Capsule PG-associated lipoprotein

Chitin Teichoic acid

Ergosterol Transpeptidase

Lipopolysaccharide

Create questions and subquestions via the + buttons below, or by dragging boxes on the template. Reorder and indent questions by dragging them in the outline.

#	Title	Points
1	Match microbes	4
1.1	B	2
1.2	D	2
2	The Wrinkled Peach	5

[+ New Question](#)



Time-saving tip:
Title the questions with the starting text (will help you find the matching question on the next version) or the correct answer (helps match grouped simple text with rubric items)



Assign graders to specific questions



Time-saving tip:
Assign questions using the outline (may want to remove names before Publishing it to protect them from student ire)



Outline for Example multi-version exam vA

9 points total

 Edit Name Region

 Edit ID Region

Create questions and subquestions via the + buttons below, or by dragging boxes on the template. Reorder and indent questions by dragging them in the outline.

#	Title	Points
1	Match microbes	4
1.1	B - Margaret	2
1.2	D - Mark	2
2	The Wrinkled Peach - Andy	5

[+ New Question](#)

Cancel

Save Outline



Create additional versions

Duplicate the first version of the assignment



Time-saving tip:
Make all copies of your assignment BEFORE creating the rubric for any version



Duplicate an Assignment

Select an assignment to copy to this course and name the copy.

* Required field

Gradescope 202
Spring 2022

Demo Online Assignment

Demo Programming Assignment

Demo Quiz

Example multi-version exam vA

Gradescope Tutorial
Spring 2017

Assignment Examples

Copied Assignment Title *

Example multi-version exam vB

Cancel

Duplicate



Group all versions into a set (in an exam container)

Organize Exam Versions

 Organize multiple versions of an instructor-uploaded exam under a version set.

* Required fields

Add Exams to a Version Set *

Version A


Version B

[+ Add Version](#)

Exam Version Set Title *



View of exam versions & container


 < ☰

Gradescope 202

Advanced Gradescope Features

- Dashboard
- Assignments**
- Roster
- Extensions
- Course Settings

Instructor

 Miriam Markum



5 Assignments

Name	Points	Released	Due (PDT)	Submissions	% Graded	Published	Regrades
Example multi-version exam	2.0			0	0%	<input type="radio"/>	ON
↳ Example multi-version exam vA Version A	2.0		Sep 14	0	0%	<input type="radio"/>	ON
↳ Example multi-version exam vB Version B	2.0		Sep 14	0	0%	<input type="radio"/>	ON



Replace the template and create the Name Region and ID Region for all copied versions



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Example multi-version exam vB

Version B

- Edit Outline
- Create Rubric
- Manage Scans
- Manage Submissions
- Grade Submissions
- Review Grades

- Regrade Requests
- Statistics
- Settings

Edit Assignment


Basic Settings

* Required field

Title *

Example multi-version exam vB

Template

 MIC_102_SQ23_Final_Exam_vA.pdf

[Replace PDF](#)

[Download PDF](#)

Who will Upload Submissions?

Instructor

Submission Anonymization

Enable anonymous grading

Hide identifiable student information from being listed with submissions.

Canvas Assignment

 No Canvas course linked. [\(edit\)](#)

Grading Defaults

Default Scoring Method

Negative scoring

Positive scoring



Reposition the copied question boxes to the correct location in each copied version.

(teeedious if many questions!)



Time-saving tip:
 Drag all boxes to be moved to the edge of pages they don't belong on. Be careful not to re-size the boxes.



1. (2 pt each) Match each set of features with the microbe it best describes.

x 1: B B = Bacterium C = Fungus D = Protozoan E = Virus

Multicellular, pro-inflammatory, performs sexual and asexual reproduction

_____ Buds during replication, genome encodes RNA-dependent DNA polymerase

_____ Fixes nitrogen, 70S ribosomes, phospholipids have ester linkages

_____ Performs co-transcriptional translation, not sensitive to antibiotics

_____ Photosynthetic, single-celled, translates using formyl-Met

_____ No cell wall, amoeboid motility, in the domain Eukarya

_____ Ancestral cell gave rise to eukaryotic progenitor, monolayer membrane

_____ Nonmotile, outer layer is membrane, has no proton motive force

2. (5 pts) Jess inoculated two identical flasks of nutrient broth with same number of *Proteus vulgaris* cells. She then incubated the flasks and measured the turbidity (optical density, O.D.) as the cultures grew over time. At the time indicated by the arrow, she made a single change to Flask B ONLY.

x 2: The Wrinkled Peach (1 point)

Identify a change that, on its own, could explain the different patterns of growth between the two flasks. Select all options that apply.

She added *P. vulgaris* cells that were in log phase.

She added a different carbon source.

She raised the temperature to *P. vulgaris* optimal growth temperature.

She added HEPES, a buffer that maintains a pH between 6.8 – 8.2.



How to get exam forms into Gradescope?

- Sort paper forms by version
- Chop/cut off stapled edge
- Scan using high-throughput scanner
 - Scanner available at the UE Testing Office
- Upload scanned files into correct Assignment version in Gradescope




Epson DS-780N
Network Color
Document
Scanner



Confirm that all students who took the exam are matched with a submission

Manage Submissions

On this page you can assign names to student submissions, replace individual submission PDFs, and remove submissions. Use the `tab` key to quickly go through the name assignment fields. If something does not look right, you can  turn off automatic roster matching.

177 Submissions  30 / 506 Students Have Not Been Matched

All

163 Auto-Assigned

0 Unassigned

 Search by name



All Assignment pages are now in Gradescope and linked to a student in the roster.

Let the grading begin!





Time-saving tip:

1st: Grade all submissions for just ONE version.

2nd: QC/refine the question rubrics.

3rd: Import question rubrics into the other versions and complete the grading.



Build your rubric (create, import)

Import Rubric

< Back to

Example **exam vA**

Version /

Edit

Create

Manage

Manage

Grade

Review

Assignment **Question** **Rubric Preview**

worksheet 1		
	1.1: B	+2.0 Correct: B
MT2 (make-up)	1.2: D	
MT2 Group exam	1.3: A	+0.0 Incorrect or unanswered
Worksheet 3	1.4: E	
Final exam vC	1.5: C	
Final exam vA		
Final exam vB	1.6: E	
Worksheet 2	1.7: B	

Cancel **Import Rubric**

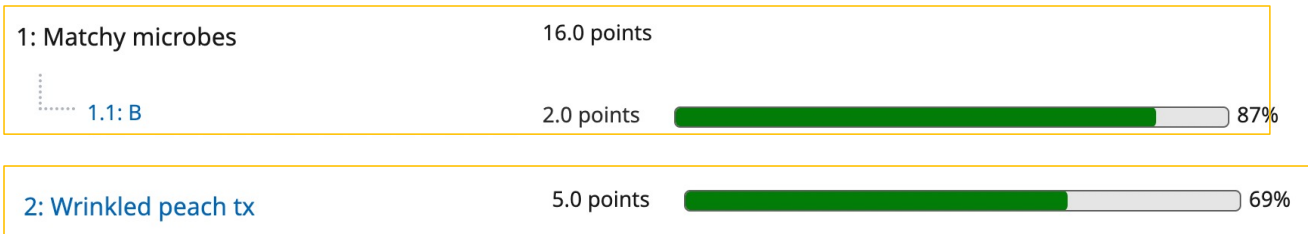


Time-saving tip:
Import default rubric items for expected issues (e.g., unanswered questions, Talk with Dr. M, Flag for similarity, etc)



Statistics, Review Grades

Statistics (by version; overall descriptive stats or by question)



Review Grades (by version or all versions)

A row of five buttons for grade management:

- Download Grades
- Export Evaluations
- Export Submissions
- Post Grades to Canvas
- Publish Grades >



To Post All Grades to Canvas

Post All Grades to Canvas ✕

Instructions

- Grades from linked users' submissions will be posted to the Canvas assignment listed below.
- Existing grades in Canvas (for linked users) will be overwritten.

Linked Canvas Course

⚠ No Canvas course linked. ([edit](#))

Linked Canvas Assignment

⚠ No Canvas assignment linked. ([edit](#))

⚠ There are no grades to post. To post grades, sync your roster and grade the linked users' submissions.

[Close](#) [Post Grades](#)



Wait for the regrade requests to roll in!



Time-saving tips:

Don't review regrade requests until after the end date and instruct your grading team to do the same. Shut off Regrade Request Notifications in your Gradescope account.

Require students to include a description of the correct answer with their request to qualify for a review.

gradescope by Turnitin

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Example multi-version exam

Review Grades

Regrade Requests

Settings

Regrade Request Settings

i Enable or disable regrade requests, and optionally set a time window.

Regrade Requests

Enable regrade requests

Start Date: mm/dd/yyyy, --:-- --

End Date: mm/dd/yyyy, --:-- --

i Regrade requests for this assignment are open until regrade requests are disabled.

Cancel Save



Takeaways



- ✓ Gradescope is a fantastic grading tool
 - ✓ Especially critical for high-enrollment classes with short-answer assessments
- ✓ The Multi-Version Assignments feature
 - ✓ Will be very useful for instructors with multiple versions of assignments who want the scores synced to the same Canvas grade item
 - ✓ But is not yet an efficient tool to grade Assignments in which versions are created by rearranging questions



Questions, suggestions, wonderments?

