

STEM Teaching Hacks Workshop #4: Syllabus Writing & Course Structure

BRANDON CAMPITELLI, SARAH EICHHORN, KEELY FINKELSTEIN,
KRISTIN PATTERSON



The University of Texas at Austin
**Texas Institute for Discovery
Education in Science**
College of Natural Sciences

Workshop Expectations



The University of Texas at Austin

Texas Institute for Discovery

Education in Science

College of Natural Sciences

Warm-up Activity

- Find a partner you don't know well
- Introduce yourself
- Talk to discover two things in common
- High five
- Repeat with new partners until time is up



Hack #1 – Setting classroom environment

If you want students to interact during class, ask them to interact on the first day

- Basic question prompt, such as “What is your favorite restaurant in Austin?” Share with class.
- T/F quiz: Best if answers are not clearly true or false. Students complete quiz in groups and discuss with whole class.
- Students brainstorm about the course title and mind map their answers.
- Students discuss their goals or concerns about the class. Discuss and relate to your plan for the class.



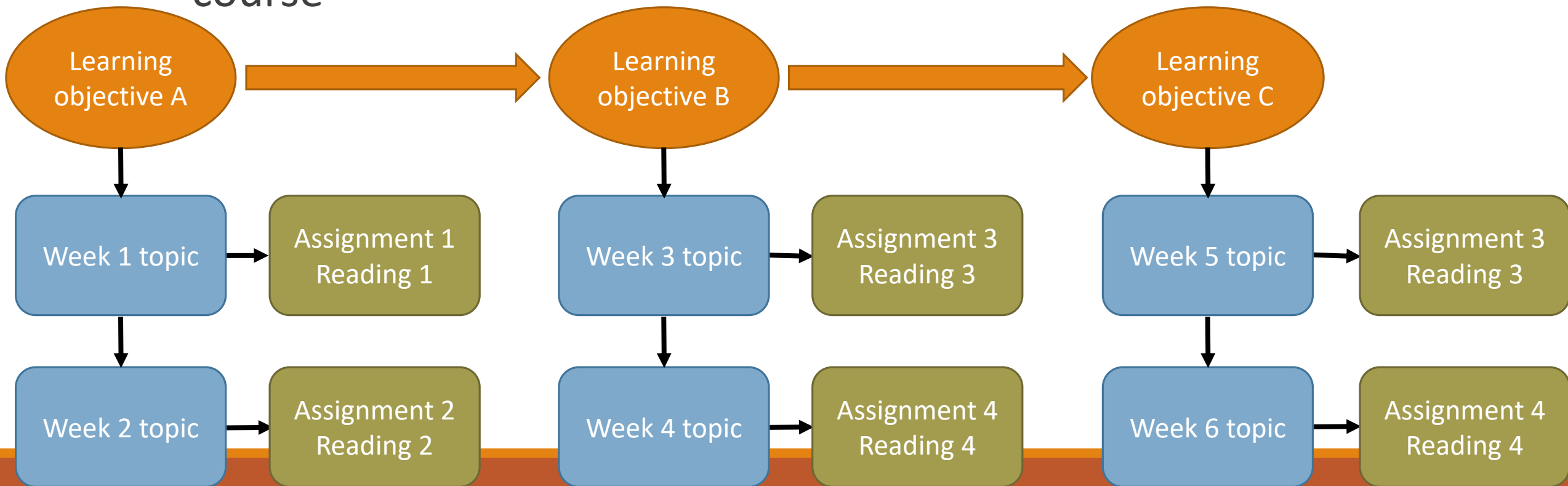
Hack #2 – Course syllabus innovations

- How can you make your syllabus more engaging/interesting so that students may actually read through it?

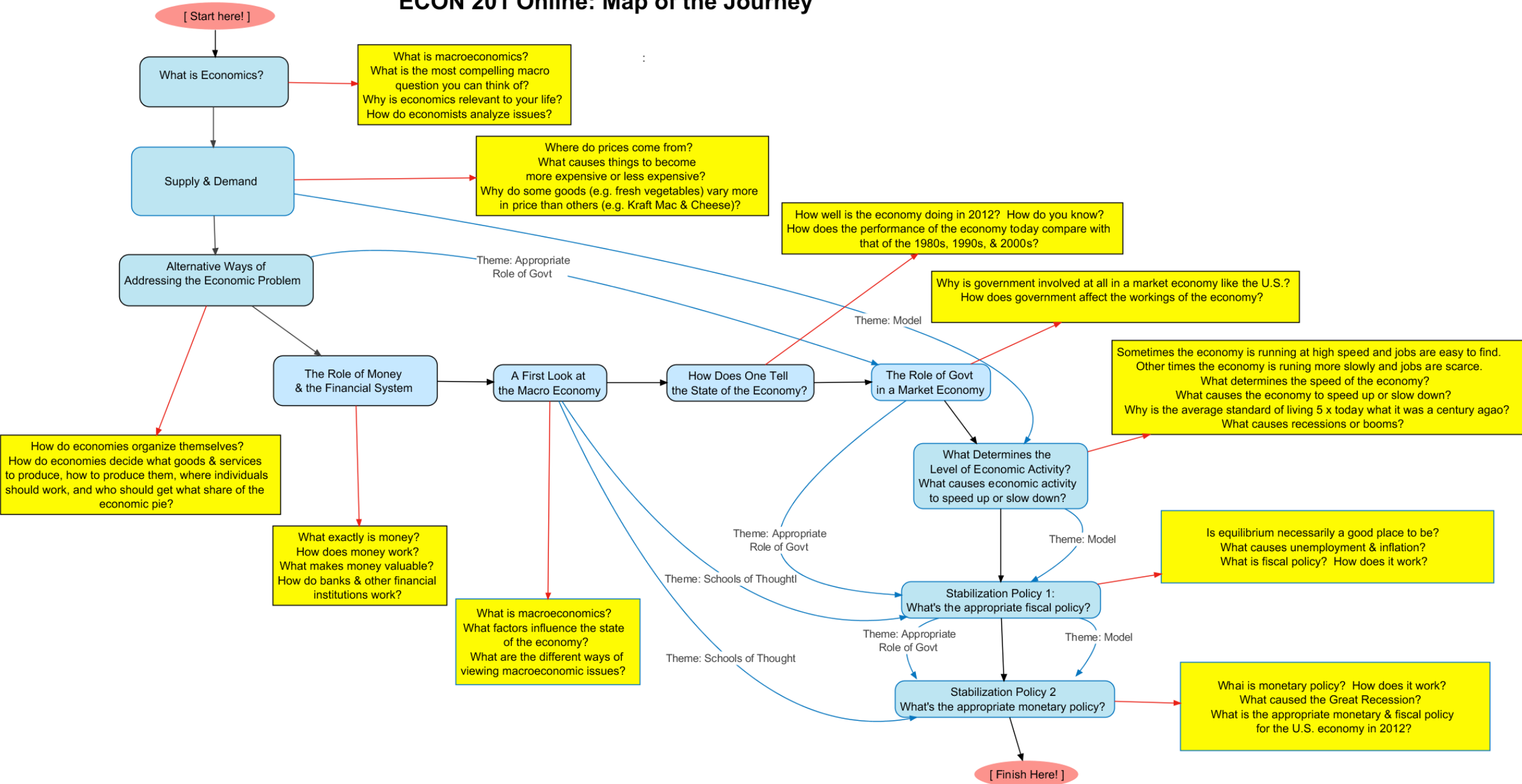


Hack #2a – Visually display course structure

- Visually display course structure around learning objectives or topics/units/modules so students see the natural flow of the course



ECON 201 Online: Map of the Journey



Hack #2a – Visually display course structure

May Term 2014

INFOGRAPHICS

IN POPULAR MEDIA
a syllabus

Dr. Curtis Newbold
Office: Foster 416
Hours: M/W 11-2
Email: cnewbold@
Phone: [REDACTED]

WHAT WE'LL LEARN

History: The history of infographics, how they have played a role in communicating information for diverse audiences, and what their contemporary role is in popular culture and the media.

Ethics: The ethical dimensions of infographics, how they affect the way people interpret data, and how they can (mis)represent information.

Influence: The influence infographics, how they have been used across media platforms, and how they increase readership, brand awareness, and the general spread of information.

Creation: How infographics are created, how research is conducted, what tools are used, and how infographics are produced for different media.

REQUIRED MATERIALS

The Best American Infographics 2013
By Gareth Cook
ISBN: 978-0-547-97337-1

Infographics: The Power of Visual Storytelling
By Lankow, Ritchie, and Crooks
ISBN: 978-1-118-31404-3

Pen Paper Laptop

ASSIGNMENTS

infographic	40
research & story mockup	20
Attendance & Projects	20
Peer Review	10
presentation	10

GRADING

A	90-100
B	80-90
C	70-80
D	60-70
F	50-60

POLICIES

- NO late work will be accepted.
- NO cheating will be tolerated.
- ONLY one absence is allowed.
- RESPECT your peers.
- DON'T use cell phones during class.

<http://thevisualcommunicationguy.com/2016/08/16/how-to-write-a-syllabus-students-may-actually-read-six-quick-tips/>

Hack #2b – Write your syllabus like an ad

- Write headers as questions
 - *E.g.* “What is this course?”, and “What am I going to learn?”
- Write sections in second person
 - “You’ll get the opportunity to integrate the..” rather than “Students will learn how to apply...”
- Write in an engaging tone (not dry)
 - Write as if you were giving a sales pitch. Let your passion show!
- Formatting
 - Use at least two fonts. Maintain lots of white space.
 - Use bullet points and tables instead of paragraphs



Hack #3 – Evaluate your syllabus

- Is your syllabus content-focused or learning-focused?
- After developing/redesigning your syllabus, evaluate it as you would any piece of work....with a rubric.
- In groups of three, briefly evaluate the syllabus given to you using the provided rubric.



<http://cte.virginia.edu/resources/syllabus-rubric/>
<http://enact.sonoma.edu/content.php?pid=218878&sid=2032318>

© Can Stock Photo



The University of Texas at Austin
Texas Institute for Discovery
Education in Science
College of Natural Sciences

Activity



Syllabus Rubric

Overview

To enrich the resources for measuring the impact of educational development work, we have created a rubric to assess the degree to which a syllabus achieves a learning orientation. The rubric provides qualitative descriptions of components that distinguish learning-focused syllabi and uses a quantitative scoring system that places syllabi on a spectrum from content-focused to learning-focused. It is flexible enough to accommodate a diverse range of levels, disciplines, institutions, and learning environments yet nuanced enough to provide summative information to developers using the tool for assessment purposes and formative feedback to instructors interested in gauging the focus of their syllabi.

Our syllabus rubric was awarded the 2014 POD Network Innovation Award. Here's the project summary created for the annual conference in Dallas, TX: [POD Innovation Award Poster](#).

User Guide

To help others use the rubric effectively, we've created a User Guide that includes 1) relevant background information and details about validity and reliability, 2) the complete rubric, scoring directions, and a blank scoring sheet, 3) references, 4) and six reference syllabi which we've scored and fully annotated. Because this is a living document, check back regularly so that you have the most up-to-date version.

- [Syllabus Rubric Guide \(2-13-17\)](#)
- [Syllabus Rubric Scoring Sheet - Excel \(6-9-15\)](#)

CTE Resources

[Syllabus Design Workshop](#)

[Tailoring Application Materials To Job Postings](#)

["Presence" When Presenting](#)

[Can Scholarly Writing Do Anything Useful?](#)

[Syllabus Design](#)

[Networking And Informational Interviewing](#)

[Teaching With Technology Showcase Of Projects In Arts, Research, And Curriculum](#)

["You Can Observe A Lot By Just Watching"*: Learning From](#)

Hack #4 – Low stakes assignments

- Consider inclusion of low stakes assignments (<5% of grade) in your grading scheme which will enhance student participation, increase application exposure or promote effective study.
 - Examples:
 - Pre-class reading quizzes
 - “Muddiest point” writings
 - Discussion Board posts
 - Find relevant news articles
 - Study Guide preparation
 - Classroom voting
- In-class activities
 - Syllabus quiz
 - Concept maps
 - Daily/weekly summaries
 - Reading notes, lecture notes
 - Campus/community event attendance



Activity

- Which of the following that are made of **wood**?



Rayon



Hack #5 – Lesson planning: Engagement

- Pre-class reading: Students must post at least one discussion question on reading before start of class.
- Students bring relevant news articles (+ notecard) to discuss twice per semester. A few randomly chosen students present 1 minute overview during class each day.
- Instructor brings relevant news articles to class, and spend first 5 minutes discussing and connecting to course material.



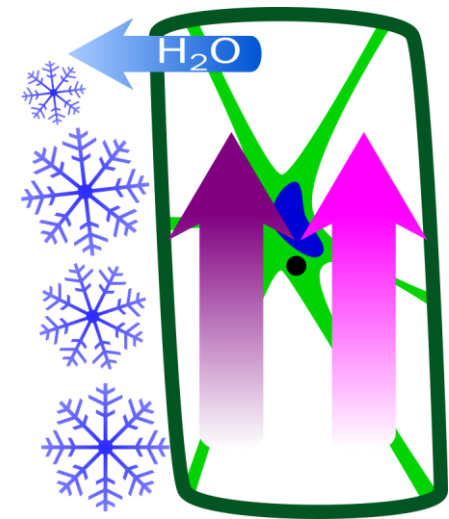
Hack #6 – Lesson planning: Prepare questions ahead of lecture

- In your lecture notes/slides, insert discussion questions throughout that go beyond the typical “Are there any questions?”.
- Always give students time to think and answer.
 - The 8-second rule



Hack #6 – Lesson planning: Prepare questions ahead of lecture

- Why do you think winemakers wait until temperatures reach -8°C (17°F) before harvesting their grapes for dessert wine?





canvas
BY INSTRUCTURE

Hack #7 – Leveraging Canvas

- Set up assignment shells to get due dates on the calendar
- Arrange modules in reverse order to keep recent material at the top
- Avoid the question “Can I still get an A in the course?”
 - “What if” function in student view
 - Provide a grade calculator
- Use graded surveys to grade based on completion
- Pre-stage class emails



The University of Texas at Austin
Texas Institute for Discovery
Education in Science
College of Natural Sciences


Canvas: Assignment shells

- Students depend on calendar items in and alerts from Canvas.
- You can make and publish all of your assignments without content at the beginning of the semester.
- “Available from” determines when students can access the assignment.

Assign to



Everyone ×

Due

Dec 10 at 11:59pm 

Sun Dec 10, 2017 11:59pm

Available from **Until**

Dec 5 at 11:59pm  Dec 12 at 11:59p 

Tue Dec 5, 2017 11:59pm Tue Dec 12, 2017 11:59pm

+ Add

Canvas: Modules

List in reverse order to keep new content at the top!

Modules

Grades

People

Quizzes

Pages

Assignments

Syllabus

Files

Outcomes

Conferences

Collaborations

Discussions

Settings

Week 2

You can organize material by week or by topic

I'm inserting a text header to write text into this module.

READ Chapter 1 & 2 of BIO textbook

Week 1

Inbox: Where You Email Students

Settings (upper right): Controlling Canvas Notifications

Settings (at bottom of Course Nav): Student View & Course Admin

Need More Help?

Training Agenda

Sample First Day Activities v.2.pdf

Canvas: "What if" function

Students can see how performance on assignments affects course grade.

Midterm Exam 1	Oct 4 by 7pm	52	100	
Midterm Exam 2	Nov 1 by 7pm	65	100	
Midterm Exam 3	Nov 20 by 7pm	83	100	
Final Exam	Dec 18 by 7pm	100	100	

Total: 72.92%

Show Saved "What-If" Scores

NOTE: This is NOT your official score.



Revert to Actual Score

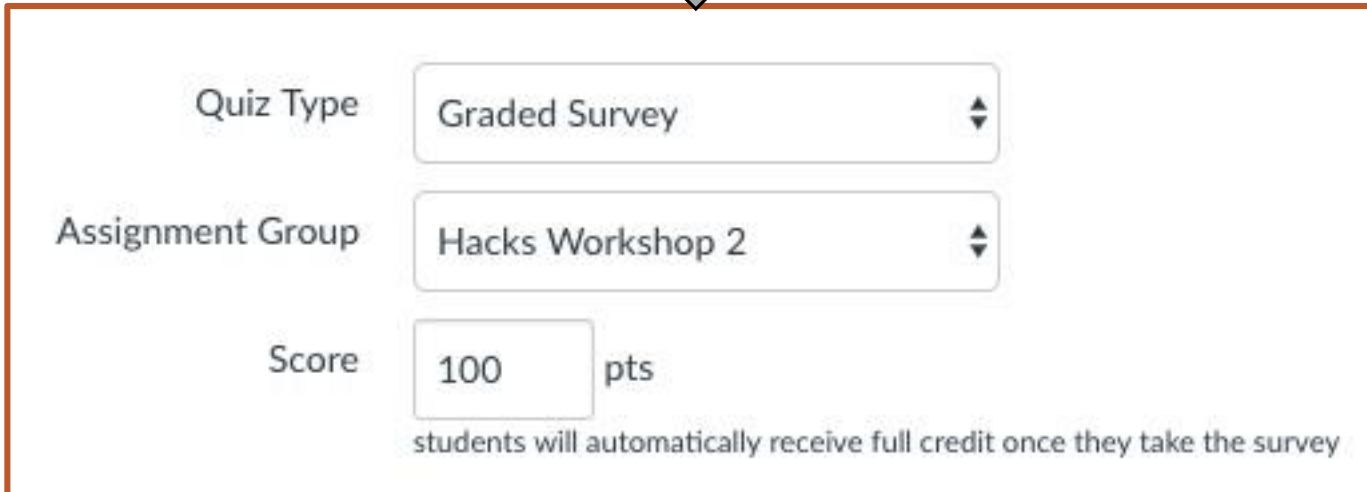
Grade calculator

If Canvas can't calculate grades due to your grading scheme...

BIO 325-Genetics										
Fall 2017 Grade Calculator										
	Lowest exam	Exam	Exam	Final Exam	Quiz	Discussion	Learnsmart	Supplemental	Tophat	Total*
Enter your grades here:	100	100	100	100	100	100	100	100	100	
These are the weighted values in each category:	10	20	20	25	5	5	5	5	5	100
*See the syllabus to determine how percentage will be converted to letter grades.										

Canvas: Graded surveys

- Go to your Canvas course
- Click on “Quizzes” on the left side 
- Under “Quiz type” select “Graded survey” 

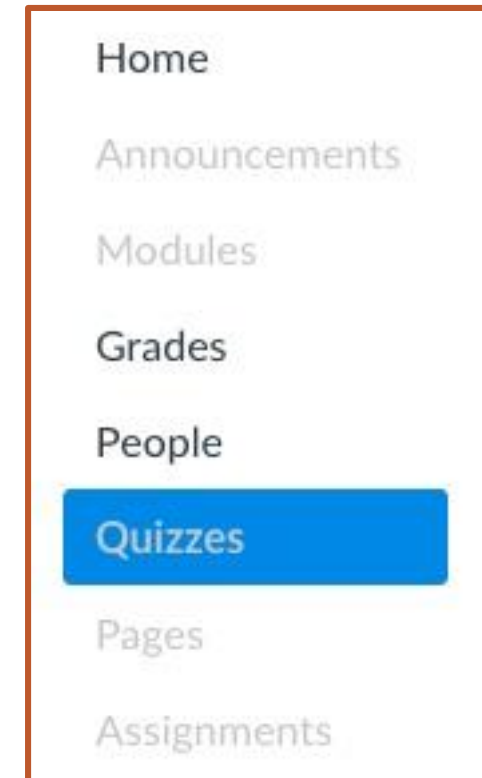


Quiz Type

Assignment Group

Score pts

students will automatically receive full credit once they take the survey



Hack #8 – Lecture toolbox

- Prepare a “toolbox” of items you will return to throughout the lecture.
 - This can be put in a saved space on the corner of the board, a page repeatedly displayed on doc cam, a handout, or a slide repeatedly used in PPT presentation.
- Examples of tool box items:
 - Equations
 - Figures
 - Definitions
 - Schematics



