Remote Exams Menu
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Introduction
This menu is lays out a series of options for remotely delivered exams (or quizzes). There are a spectrum of options depending your exam objectives and the level of technology you wish to use.

Exam Objectives
Before reviewing this document, we recommend that you sit back and list your objectives of your upcoming exams. It is valuable to quantify what your objectives are for:

- measuring student knowledge
- acceptable level of student stress/effort
- tolerance for cheating risk

Every instructor (and different quizzes/exams) will have different objectives. Be honest in your objectives and you will be able to find a combination of exam attributes to match.

Alternative Assessment Options
If your objectives are pointing you away from a traditional exam, feel free to explore the following links outlining alternative options.

- CSU TILT Alternative Assessments https://www.online.colostate.edu/faculty/assessments.dot
- Rutgers Remote Exams and Assessments https://coronavirus.rutgers.edu/resources-for-faculty/remote-exams-and-assessments/

Traditional Exam Options
When it comes to traditional exams it is likely that you will have to make some adjustments when compared to what you have done in the past. Below you will find a menu describing the pros / cons and your various options for designing a traditional exam or quiz for online distribution. Think of each section as part of an ‘a la carte’ menu as many of the options can be mixed and matched to fit your exam objectives.
Honor Pledge
We recommend starting your exam with some sort of pledge to promote academic integrity while taking the exam online. This is in alignment with established online teaching best practices and there is scientific literature to suggest truth pledges are effective in decreasing cheating [https://www.sciencedirect.com/science/article/abs/pii/S0167487018304148](https://www.sciencedirect.com/science/article/abs/pii/S0167487018304148). Depending on the platform you administer the exam, there may be different options for creating your pledge.

The example below uses the CSU Honor Pledge [https://tilt.colostate.edu/Integrity/Pledge](https://tilt.colostate.edu/Integrity/Pledge).

"I have not given, received, or used any unauthorized assistance."

Dan nested this pledge into a Canvas Quiz fill-in-the-blank question worth 0 pts on an open-book, open-note, self-timed quiz.

By typing your name below in agreement to the CSU Honor Pledge "I have not given, received, or used any unauthorized assistance", you agree to the following terms:

- You will complete this exam on your own, using only your knowledge, the provided equation sheet, and a calculator,
- You will limit your work on this quiz to 30 minutes. If any unforeseen interruptions happen, you are welcome to come back later to finish the quiz, and
- You will refrain from talking to anyone in our class about the exam until after the exam closes on Wednesday, April 22 at 10pm MT.

I (type your full name) [name] will take this quiz in accordance with the CSU Honor Pledge.

Format
The format of your exam may or may not need to change depending on the timing and delivery options you chose above.

<table>
<thead>
<tr>
<th>Online Tool</th>
<th>Handwritten / Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can use the Canvas Quiz tool to create (exams see Variation below if you’d like to create variation among each student’s exam). Alternately, if you use a publisher’s LMS (McGraw Hill Connect, Pearson MyEngineering lab, etc), you can create exams from pre-built problem sets.</td>
<td>If you do not want to change how you have conducted exams rom the past, you can have your students complete a handwritten exam by uploading the exam to a Canvas Quiz <a href="https://app.canvas.com">file upload question</a> (if you are timing the exam) or a Canvas <a href="https://app.canvas.com">Online + Upload Assignment</a> (if untimed). Either way you can grade the exam in Speedgrader OR download the submissions to grade externally.</td>
</tr>
<tr>
<td><strong>Pros</strong> Prebuilt problems make your life easier. Can have a blend of multiple choice, numeric, and algorithmically created problems.</td>
<td><strong>Pros</strong> You don’t need to change from how you have conducted exams in the past. Great for partial credit computational problems.</td>
</tr>
<tr>
<td><strong>Cons</strong> May need to code your existing exam into online tool or create new one from scratch within each tool.</td>
<td><strong>Cons</strong> Not auto-graded. Opens the door to students cheating.</td>
</tr>
</tbody>
</table>
## Time Duration

When it comes to the time you allow students to work on the exam, there are two clearly defined options (timed vs. untimed), plus hybrid located at the bottom of the table below.

<table>
<thead>
<tr>
<th>Timed Exam</th>
<th>Untimed Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students have a set amount of time (usually a normal class period amount) to complete the exam.</td>
<td>Students have a due date but can otherwise work on the exam at their leisure. Exam release/submission can be adjusted according to your objectives (from a few hours to a week).</td>
</tr>
<tr>
<td><strong>Pros</strong></td>
<td><strong>Pros</strong></td>
</tr>
<tr>
<td>Likely consistent with how you have run exams in the past.</td>
<td>Much more flexibility from the student perspective. Makes it much less likely for professor to have complaints about timing.</td>
</tr>
<tr>
<td>Allows you to reuse old exams with minimal changes. Can be proctored to reduce potential of cheating (see below for proctoring options).</td>
<td>Possibility of cheating increases. Unless you already have take-home exams, they are typically more difficult to design. By nature, cannot be proctored.</td>
</tr>
<tr>
<td><strong>Cons</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>Not a flexible solution. Students may have trouble completing the exam in the allotted time due to distractions at home, internet connectivity issues, work/family schedules, or a non-ideal testing environment.</td>
<td></td>
</tr>
</tbody>
</table>

### Hybrid of Timed/Untimed: Canvas Quiz with Monitored Time

Even for untimed Canvas Quizzes, Canvas records the amount of time students are working on untimed Exams. You can check the times by visiting the 'Moderate This Quiz' link on each Canvas Quiz page.

**Pros**

- No added technology required for instructor or student. Exhibits trust in the students.  
  Comment: Dan tested this for a midterm and was pleased with the results.

**Cons**

- This hybrid does not prevent students from communicating with each other but does provide them a time framework to work within. The monitored times appear to be accurate to a minute if <60 min, but then rounded to hours when >60 minutes.

## Delivery (if you choose a timed exam)

**If you choose to do a timed exam**, there are two main options for your exam delivery, asynchronous or synchronous. Keep in mind, these options are irrelevant for a take-home style exam.

<table>
<thead>
<tr>
<th>Synchronous*</th>
<th>Asynchronous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students must complete the exam at the normal class time. Example, if you teach an MWF class that meets at 10am, your exam would be on a Friday at 10am and would last 50 minutes.</td>
<td>Students still have a time limit but have flexibility on when to start the exam. This is the method of delivery recommended if you decide to administer a timed exam.</td>
</tr>
<tr>
<td><em>This method of delivery is not recommended by Dan and Sam.</em> If you decide to run your exam like this, please have contingencies in place for students with bad internet connectivity and in difficult situations.</td>
<td>Students have the flexibility to ensure that they are ready to take the exam before beginning. If cheating is a concern, you can limit the time frame of the exam without making it strictly synchronous (e.g. students can start the exam anytime between 9-11am).</td>
</tr>
<tr>
<td><strong>Pros</strong></td>
<td><strong>Pros</strong></td>
</tr>
<tr>
<td>Again, this is likely consistent with how you have run exams in the past. Significantly reduces the possibility of cheating.</td>
<td>Flexibility on starting can reduce student anxiety. Furthermore, reduces potential problems for professor as the students will have fewer excuses to having access to the exam.</td>
</tr>
<tr>
<td><strong>Cons</strong></td>
<td><strong>Cons</strong></td>
</tr>
<tr>
<td>Again, not a flexible solution. Students may have trouble completing the exam in the allotted time due to distractions at home, internet connectivity issues, or a non-ideal testing environment. Can cause significant stress to the students.</td>
<td>Again, the possibility of cheating does increase with this option. Consider</td>
</tr>
</tbody>
</table>
## Variation (add-ons for the Canvas Quiz tool)

If you are giving an exam style where you would like students to have different exams, there are a few options (which can be used separately, or all together).

<table>
<thead>
<tr>
<th>Vary answer or problem order</th>
<th>Vary numeric values in a problem</th>
</tr>
</thead>
</table>
| In the Canvas Quiz tool you can:  
**Shuffle answers** – Select option on ‘Details’ tab when building a Quiz, so that each student gets a different order of answers.  
**Shuffle questions** – Create a ‘Question Group’ and place your questions inside this group (note all questions in a group are restricted to the same point value).  
**Draw random questions from a group** – If you have more questions available than the number you wish to ask, you can add more questions to a ‘Question Group’ than you ask Canvas to use for each students. | In the Canvas Quiz tool you can create numeric Formula questions which give each student a different set of input parameters and ask them to find a numeric answer which matches their input values. |
| **Pros**  
Prebuilt problems make your life easier.  
Can have a blend of multiple choice, numeric, and algorithmically created problems.  
| **Cons**  
May need to recreate an exam from scratch to fit the online tools.  
Creating your own algorithmic problems can be tricky.  |
| **Pros**  
Forces students to each do their own calculations for a take-home exam.  
| **Cons**  
You need to compute the answer equations which can get quite long in multi-step problems.  
Currently can only ask one question per each student’s input values.  |

### Time Saving Tip for Canvas Quizzes:

Canvas automatically saves all quiz questions that you have created to your Question Bank. If you have created many questions in this or previous iterations of your course and not organized them, you’ll find the questions all likely in the ‘Unfiled Questions’ bank. If you wish to add questions from the bank, select ‘Find Questions’ at the bottom of the Questions tab when building a quiz.

## Proctoring (for any online-based exams)

As human-to-human proctoring is not an option currently, there are a few options for exam proctoring.

<table>
<thead>
<tr>
<th>Proctored Online</th>
<th>Un-proctored</th>
</tr>
</thead>
</table>
| Students use additional technology on their browser and their webcam to be monitored by a remote service while taking the exam.  
- Respondus is available via contracts with CSU. See TILT Online Proctoring Website for more information.  
- | Students, on their honor, to abide by the terms of the quiz or exam. |
| **Pros**  
Likely not failproof but would significantly reduce the possibility of cheating.  
| **Cons**  
Could be viewed a bit intrusive to ‘watch’ student take an exam.  
Requires more steps/work/likely stress for both student and faculty.  |
| **Pros**  
No added reliance on technology.  
| **Cons**  
Increases cheating risk, which can be mitigated with other choices.  |