Academic Integrity Software Ad Hoc Committee Recommendations

We acknowledge that it is a huge challenge to adapt our face-to-face courses to remote instruction, and we appreciate the efforts that faculty, lecturers, and staff have done to make the transition as seamless as possible. Many instructors have expressed concerns about how to remotely assess students' understanding of the material in their courses. The Academic Integrity Software Ad Hoc Committee was formed to develop recommendations for how to use software/technology to assist with such assessments while protecting both academic integrity and the privacy of our students. We encourage instructors to consider these recommendations in deciding what will work best for their own courses, keeping an open mind that <u>it may not be possible or even desirable to do assessments in the same way that they would for a face-to-face course</u>.

In this document, we use the term "high-stakes assessment" to mean timed exams worth a large fraction of a student's grade.

Our recommendations are based on queries to colleagues at UCSB, other UCs, and elsewhere; a survey of faculty teaching large classes at UCSB; consultation with UCSB's Center for Innovative Teaching, Research, and Learning (CITRAL) and Instructional Development office; and our own investigations. This document is a work in progress and will be updated as new information becomes available.

<u>Our main recommendation is to try to move away from high-stakes assessments which require intensive proctoring</u>. We will describe a number of alternatives to high-stakes assessments that leverage technology for their execution and/or grading. In cases for which online proctoring is deemed necessary, we will describe key issues to be considered. It is also crucial that <u>instructors clearly communicate their academic honesty expectations with their students</u>.

Many of our recommendations require access to technologies such as high-speed internet, laptops, webcams, smartphones, printers, etc. We cannot require or assume that students will own or have easy access to all of these, particularly students from nontraditional or lower socioeconomic groups. Moreover, students may have issues with bandwidth and dropped connections during assessment activities. <u>We strongly encourage instructors to be flexible and patient in determining assessment options that work for all of their students</u>.

A useful campus resource on assessments which overlaps with some of our recommendations is given here:

https://keepteaching.id.ucsb.edu/assessment

Alternatives to High-Stakes Assessments

We recommend that instructors start by thinking about their goals for what they want students to learn from their course, then work backward to determine the best ways to do assessments. Some options to consider are the following:

Open Book / Open Resource Exams and Projects

A good way to avoid the need for intensive proctoring is to give exams and/or project assignments for which students are allowed to use their notes, books, and online resources. This is a paradigm shift for many instructors, but it is more reflective of real-world tasks and problem-solving. If instructors give such exams or projects, we recommend that students be required to agree to an honor code stating that the work that they submit represents their own effort. Honor codes are discussed further below.

Divide and Conquer

A simple way for an instructor to switch from high-stakes summative assessments to low-stakes formative assessments is to divide their normal midterm and final exams into shorter weekly quizzes. For example, rather than a midterm exam worth 50% and a final exam worth 50%, the instructor could have 10 weekly quizzes, with each quiz worth 10%. The questions can be the same as what they would normally be on the midterm but grouped into a weekly quiz that focuses on the main topic of that week's study. The same can be done for the final.

If desired, an instructor could still have a summative final exam, but make it shorter and worth fewer points than normal, because students will have done quizzes on that material already. For example, the final could consist of the 10 questions that most students got wrong on the weekly quizzes. In this way, it would be comprehensive, but not represent such a high percentage of the student's grade to make it worth cheating. In fact, if instructors tell their students that the final will consist of the most missed questions from the weekly quizzes, it will let students know what to focus on when they study for it. With, for example, eleven quizzes over the quarter, instructors could offer to drop the lowest quiz score from the quarter and still have the same number of points that they normally use to assign a grade based on only two exams.

This strategy reinforces learning because the students are being tested on the material right after they have been engaged with it, rather than weeks later. They also get feedback on whether they have learned the material more quickly, which gives them more opportunities to "course correct".

Self-grading Quizzes, Homework, and Assignments

The GauchoSpace Quiz activity allows instructors to do low-stakes assessments which are graded automatically. Quiz questions can be multiple-choice, true-false, short answer, calculated, calculated multi-choice, calculated simple, drag and drop into text, drag and drop markers, drag and drop onto an image, embedded answers (Cloze), essay, matching, numerical, random short-answer matching, and select missing words. GauchoSpace quizzes can be set up so that the order of questions is randomized, the order of possible multiple-choice responses is randomized, and/or questions are drawn randomly from one or more larger question pools. Such question randomization is a good way to discourage cheating. Existing question banks can be imported into GauchoSpace. For instructions on setting up GauchoSpace quizzes, visit this link:

https://help.lsit.ucsb.edu/hc/en-us/articles/204491504-Quiz-Reference-Guide-for-Gauchospace

We note that some academic fields have developed their own systems for giving and automatically grading quiz or homework problems, such as WeBWorK for mathematics. Instructors may wish to explore such options for their classes.

Instructors may want to consider giving self-grading comprehension quizzes following lecture recordings and/or reading assignments. Very simple quizzes can also be embedded into videos recorded with Panopto: see

https://support.panopto.com/s/article/How-to-Add-a-Quiz-to-a-Video

Note that results of embedded comprehension questions in Panopto (GauchoCast) videos cannot be automatically passed to the Gradebook in GauchoSpace, so these should be viewed as quick, comprehension only, check-ins with students.

Gradescope has recently opened a self-grading online quiz engine, which is still in beta testing, to any faculty member whose institution has a Gradescope license, including UCSB. Instructors can create questions on Gradescope (short answer, free response, multiple-choice, select all, and file upload). Students log in and type and submit their answers directly within the Gradescope interface. For multiple-choice and fill-in-the-blank questions, instructors can specify the correct answer ahead of time and Gradescope automatically grades student responses. For free-response questions, instructors can grade student responses manually based on a rubric. For File Upload questions, students can complete their work on that question outside of Gradescope and then upload a photo (or any other file type) of their answer.

Note that the self-grading quiz capabilities in Gradescope are not as full-featured as those in GauchoSpace. However, if instructors will be using Gradescope to manage submission and grading of handwritten student work (see below), it may make sense to also use it for self- grading, low-stakes quizzes as well so that all assessments are in one place, making it easier for both faculty and students.

For more info, check out Gradescope's [help center documentation on Online Assignments](#).

Manually Graded Assignments

For assignments that need to be graded manually, we recommend that instructors use Gradescope, which allows for different types of assessment questions including multiple-choice, short answer, essay, and calculations. The advantages of using Gradescope are that it makes grading more consistent and fair while streamlining the process and saving time. It is also the ideal tool for efficient grading of handwritten student work such as is common in STEM disciplines and mathematics-dominant social science disciplines. It could also be very helpful for foreign language instruction where practice with handwritten, non-Roman, script systems is important. More information on using Gradescope with GauchoSpace can be found here:

https://help.lsit.ucsb.edu/hc/en-us/articles/360038904011-Gradescope-Integration

Gradescope's help page is here:

https://www.gradescope.com/help#help-center-item-answer-gro

When using Gradescope, we recommend that instructors have students use a scanning app on their smartphones to produce the file(s) to submit, instead of just taking a picture of their work on their smartphone. Such apps help to make the submissions more uniform and readable. The recommended apps are Scannable by Evernote (iOS) or Genius Scan (iOS or Android). Students can scan documents using the app and save the scan as a pdf file to their cloud-based drive, and then upload it to Gradescope or GauchoSpace.

Peer-Reviewed Writing Assignments

Instructors who give writing assignments should consider using peer review, in which students read and respond to one another's writing. This must be done thoughtfully and with suitable guidance to the students. We recommend that instructors who are interested in this option consider using the Write-Learn/Eli Review set up described here:

https://docs.google.com/document/d/1chnu2Tshl9VG3toRZwMMiwnA3JVcIUAF6MxX3Jd22iA/edit#

Audio or Video Recordings

For foreign language and other classes, it may be necessary for instructors to listen to and/or view a student speaking in order to do assessments, but it is difficult to schedule the large number of one-on-one Zoom meetings needed to do this. In such situations, it may be preferable to have students submit audio and/or video recordings of their speech.

Instructors can set up an assignment folder in GauchoCast that allows students to make their own recordings with the Panopto Recorder and upload them. Only the faculty member has access to these recordings unless they move a recording out to the general class folder. There is no time limit on these recordings. Instructions on how to do this are given here:

Use-Assignment-Folders-for-Student-Recordings

Other Low-Stakes, Low Overhead Options

A simple way to encourage class participation is for instructors to give participation points for GauchoSpace forums or other activities. Information on setting up forums for grading can be found here:

Forum Reference Guide for Gauchospace

Moreover, simple quizzes taken during or immediately after videos can be used for low-stakes assessment, or for the primary purpose of taking attendance. Additionally, the Attendance module in GauchoSpace can be set up for participation scores during synchronous activities, such as Zoom meetings.

There are many very useful ideas on alternatives to high-stakes assessment outlined in the GauchoSpace course site developed by Instructional Development and CITRAL at:

https://gauchospace.ucsb.edu/courses/course/view.php?id=80846

The entire site is full of great advice and examples, and there is a block devoted to assessment. We highly encourage instructors to review that material for other ideas and strategies.

Proctoring High-Stakes Exams

If instructors decide to give high-stakes exams, we recommend that they do so using ProctorU, which is an approved proctoring service at UCSB that allows students to take exams online while ensuring the integrity of the exam for the institution. Please note that UCSB has looked carefully into privacy concerns raised about ProctorU, and the service does not violate the rather stringent UCSB or UC privacy policies.

ProctorU offers three levels of service which will be available to UCSB instructors:

- **Record+** is fully-automated and includes ID verification and session recording. This is most appropriate for low-stakes assessments in which instructors are not concerned with active intervention during a session.
- **Review+** is for lower- to mid-stakes assessments, combining an automated ID verification and launch process with artificial intelligence behavior monitoring and professional proctor review.

- **Live+** is the most secure option for high-stakes exams. It offers live proctored exams with video recording. The proctor authenticates students, starts the exam, views the entire session, and flags suspicious behaviors. The testing session is recorded for review by an auditor when suspicious behavior is flagged, for the instructor as the student takes the test, and by the instructor after the exam session.

ProctorU is only an option for computer-based exams, not pencil-and-paper or Scantron exams. Exams must be delivered from an existing system such as GauchoSpace. There is no cost to students for using the ProctorU service during the academic year; expenses will be covered by UCSB. To use ProctorU, students need to have access to a computer with a working webcam, microphone, speakers or headphones, and a high-speed internet connection. Only Windows and Mac OS operating systems are supported; students will not be able to take an exam on a smartphone/mobile device, tablet/iPad, Chromebook, Linux/Unix laptop, or a virtual machine. Note that ProctorU is able to accommodate DSP requests by giving students additional time, as needed, and we have verified that ProctorU is screen reader accessible for DSP students that are blind or have low vision.

We recommend avoiding the use of ProctorU's Live+ service for students located in China, because of difficulties related to that country's firewall, even when VPN is used. We do not know if ProctorU's Record+ and Review+ services can be used more successfully with students located in China.

Instructors who want to use ProctorU for an exam should set up the exam with ProctorU at least one month before the exam occurs. This is necessary to ensure that ProctorU will be able to accommodate the request, and if they are not able to, it gives instructors time to come up with another plan.

We recommend that instructors inform students as early as possible that exams will be proctored using ProctorU, and at that time they should make clear to the students what the technology requirements will be. At this time, instructors should also proactively address privacy concerns, and ask the students to express any concerns (technical or otherwise) that they have.

Because remote exam proctoring requires students to have specific technologies and designated spaces for examinations, faculty cannot require students to participate in remote proctoring. Any student who indicates that they cannot or choose not to participate in a remotely proctored exam must be provided with a non-proctored exam that tests the same material (for example, an open book exam) administered during the same period as the remotely proctored exam. Faculty *may not* assign a "NG" or "I" to students and then require them to take a face-to-face exam at a later date. We stress that students from lower socioeconomic backgrounds may not have access to all necessary technology, and we do not want to create further hardships or burdens for such students by requiring them to use ProctorU.

Please be aware that employees of ProctorU are also dealing with the pandemic, and, although unlikely, they may need to shut down their service at short notice. Instructors should think in advance about a back-up plan in case this happens, such as postponing the exam.

An important consideration regarding ProctorU is that students will not all be starting and finishing their exams at the same time because of the need to stagger start times in order to serve all students in a

class. It is possible, particularly for large classes, that students who have early start times could talk to other students before they take their exams. We recommend that instructors design their exams with this in mind, for example by using question randomization so that no two exams are identical. Along the same lines, instructors can write different versions of an exam which are done in blocks: for example, all students who start between 1:00 and 3:00 PM take exam version #1, all students who start between 3:00 and 5:00 PM take exam version #2, etc.

Note that students might encounter connection issues that delay their exam start times. It should be made clear to them that the clock for their exam time only starts after such connection issues have been resolved.

We believe that ProctorU is a viable option for doing high-stakes assessments, but we still <u>strongly encourage instructors to consider alternative forms of assessment that do not require intensive online proctoring</u>. A useful single-page overview of what instructors are required to do in order to use ProctorU is available at: <u>How It Works - Faculty</u>. There is a companion sheet for students at <u>Test-Taker's Information</u>.

ProctorU and Privacy - Official Statement from UCSB

<u>Use of ProctorU across the UC System</u>

A number of UC Campuses are utilizing the online exam proctoring application ProctorU. To facilitate this use, the UC is entering into a systemwide agreement with ProctorU that will include our standard terms as they relate to security and privacy. These terms include those that prohibit the use or disclosure of any information supplied to ProctorU in order to facilitate the exam for any purpose other than to administer the exam. Nevertheless, the use of tools like ProctorU that utilize machine learning, AI, eye-tracking, key-logging, and other biometric technologies to detect potential cheating should be used only when no feasible alternatives exist as these technologies invariably have broad privacy implications.

<u>Remote Exam proctoring guidance</u>:

ProctorU is an approved online proctoring service at UC Santa Barbara. This product monitors individual students and behaviors using video and video analysis during a remote exam to preserve exam integrity. Before using this software, instructors must notify students that they will be recorded. Instructors should use the following language:

This program uses video recording and/or other personal information capture for the purpose of facilitating the test environment. The data collected is used solely for this purpose and the vendor is prohibited from redisclosing this information. Likewise, UC Santa Barbara does not use the data for any other purpose.

Instructors are encouraged to consider other options that are privacy-protective and still preserve academic integrity, whenever feasible.

DIY Zoom Proctoring

Due to the difficult technical and logistical issues involved, <u>we do not recommend that instructors use Zoom to proctor high-stakes exams</u> except in rare cases (such as individual accommodations). We especially do not recommend using Zoom proctoring for classes with more than 10-15 students.

Other Online Proctoring Options

There are other online proctoring services, including Proctorio, Respondus, and Examity. We do not endorse these services at this time for several reasons: they have not been properly vetted by UCSB, we do not have a contract in place with them, they may not be able to take on new clients given the sudden rise in demand, and we do not see obvious advantages to using these services over the different options that ProctorU offers.

Essay Exams

For timed essay exams, we recommend that instructors use a GauchoSpace quiz with essay questions. Computer-based essay exams can be proctored using ProctorU, if desired.

If essay assessments are more open-ended, for example, students have a 24 hour period to complete them, instructors may want to consider requiring students to write their essays using Google Docs, which tracks their revision history and therefore can help to identify instances of cutting and pasting from other sources. It is possible to set up Google Docs through GauchoSpace by using a "Google Assignment" - for instructions, please visit this link:

https://help.lsit.ucsb.edu/hc/en-us/articles/360024787231-Google-Assignment-Reference-Guide-for-Instructors

Disabled Student Program (DSP) Accommodations

Students who request testing accommodations should first consult with a DSP counselor to determine if the accommodation is reasonable and within the guidelines set forth by Americans with Disabilities Act (ADA). It is required that the documented needs of DSP students be accommodated in assessment activities. <u>We note that accommodating DSP students will typically be easier if alternatives to high-stakes assessments are used</u>, in particular those which do not require intensive proctoring.

For timed quizzes and exams, accommodations often involve giving DSP students extra time to complete the activity. An instructor can easily implement extended time accommodation by adjusting the student's allotted exam time settings in GauchoSpace, as described here:

https://help.lsit.ucsb.edu/hc/en-us/articles/360040476972-Quiz-and-Assignment-Configurations-for-DSP-Accommodation-

ProctorU can also handle DSP accommodation requests; instructors need to follow the instructions at this link:

https://support.proctoru.com/hc/en-us/articles/360030332332-How-do-I-receive-accommodations-for-my-proctored-session-with-ProctorU-

If accommodations apply to multiple exams from the same instructor, only one email to ProctorU is needed stating that the accommodations will cover all of the instructor's exams for that particular class.

We note that the extra time for appropriate students only needs to be given for the assessment activities themselves. For example, suppose that a DSP student is to be allowed 150% time for a one hour quiz, which is available during a 12-hour window. The DSP student should be given 1.5 hours to do the quiz, but it is not necessary to expand the 12-hour window for them.

More information on assessment accommodations is available here:

https://keepteaching.id.ucsb.edu/?page_id=169

Honor Code

It is crucial that instructors clearly communicate their academic honesty expectations with their students for all graded activities. For example, are students allowed to work with other students? Are they allowed to use their notes, online resources, etc? We recommend that for all assessment activities for which cheating is a major concern, students be required to write or type out a statement of academic honesty, such as:

"I certify that no unauthorized assistance has been received or given in the completion of this work."

We note that there is a boilerplate academic integrity statement available to be attached to most gradable activities in GauchoSpace, including quizzes and assignments. This can be enabled by clicking a checkbox when configuring the assignment. Students may not submit their work without agreeing to the statement, and since they are logged into the system, that constitutes a digital signature.

While such measures do not guarantee that a student will not cheat, it does reinforce that the university takes academic honesty seriously, and hopefully will dissuade some students from cheating.

Having said this, we encourage faculty to not overdo their policing of academic honesty during this period of remote teaching. Many students are already stressed out about the pandemic and the health of friends, family, and themselves, and may also be in a stressful living situation. Overall, our focus should be on teaching and learning, not trying to catch instances of academic dishonesty.

Academic Integrity Software Ad Hoc Committee

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