

Reconsidering Examinations in Online and Hybrid Courses at UC Davis: A Proposal

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Executive Summary:

It is Time to Reexamine Testing Policies in Online and Hybrid Courses

There are a growing number of hybrid and online courses at UC Davis, and the teachers of these courses are facing challenges in conducting their midterm and final exams because of current policies requiring that all midterm and final exams in online and hybrid courses be conducted in a live, in-person, proctored setting. In addition, unlike teachers of face-to-face courses, who may take advantage of take-home examinations, instructors of online courses do not have the same option.

Online and hybrid course examination policies require reconsideration for these reasons:

- Existing policies place undue burden on faculty to find rooms and accommodate varying student schedules (particularly in online courses), and this takes significant time away from other research and teaching endeavors.
- Existing policies preclude students from taking online courses due to scheduling conflicts with other courses.
- Existing policies don't accommodate students who live a great distance from UC Davis, or an NCTA approved testing center, including international and students with documented disabilities that prevent travel.
- Existing policies impose burdensome financial, travel, and scheduling obligations on students who take exams at testing centers.
- Existing policies do not take into account the increasing number of students who are enrolling in online and hybrid courses at UC Davis.

This proposal asks the Undergraduate Council to reexamine and update testing policies for hybrid and online courses at UC Davis.

Specifically, we propose:

1. Revising the policy to allow a faculty member let his or her students complete take-home exams in online and hybrid courses (as they are presently allowed to do in face-to-face courses).
2. Encouraging and expanding the purview of the (pilot) UC Davis testing center to include the scheduling of multiple proctored offerings of exams for online and hybrid courses.
3. Exploring alternative online proctoring options for online and hybrid courses that could be approved and used by faculty in online and hybrid courses at UC Davis.

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Online and Hybrid Testing Policies at UC Davis

Proctoring Requirements for Online and Hybrid Courses

In November 2012, largely in response to both the establishment of UC Online affiliated courses at UC Davis and the rapid growth of massively open online courses (MOOCs) at universities around the country, the Academic Senate Committee on Courses of Instruction (COCI) set the following policy for examinations in online/hybrid courses, still currently in effect and as listed in the UC Davis Faculty Guide (page 10):

Online/hybrid course midterm and final examinations (generally required in all undergraduate courses) must be proctored to ensure that the person taking the examination is the student receiving credit. Examinations must be given in a traditional classroom or an Academic Senate approved testing center; see below. Exceptions must assure that examinations reflect individual student work and that a student's rights are protected under Academic Senate Davis Division Regulation 538.

In the case of online courses, this policy requires that online/hybrid instructors reserve a classroom for a final exam even though they do not usually use one, or that all of their students arrange to use an approved testing center, often at a significant cost and inconvenience to the student.

Current list of [approved] testing centers:

- UC Davis testing center
 - [Note that a nascent UCD testing center has only just been established in 2015; no such center existed in 2012]
- Other UC testing centers
 - [Currently only UCLA and UC Irvine provide a recognized on-campus testing center; three other UCs provide testing centers only for extension students]
- Consortium of College Testing Centers approved by the National College Testing Association (NCTA) - <http://www.ncta-testing.org/cctc/>
 - [Approximately 300 centers primarily in large, metro areas]
- In the greater Davis/Sacramento region there is only one NCTA member testing center, located at American River College in Sacramento, approximately a 35-minute drive from UC Davis.
 - [Note that if you include Marysville in the greater Sacramento region, there is an additional testing center at Yuba Community College.]

Take Home Exams

When it comes to take-home final examinations, COCI has set the following policy, still in effect as listed in the UC Davis Faculty Guide (page 10):

At the instructor's option, a final examination in any course **other than an on-line course** (policy emphasis) may be wholly or in part of the take-home type. All examinations for on-line courses must be proctored *to ensure that the person taking the examination is the student receiving credit* (author emphasis).

This policy states that an instructor of a face-to-face (F2F) or hybrid course (due to F2F elements) can assign a take home exam if he or she wants to, but an online instructor cannot because there is no way to verify that the student completing a take-home exam in an online course is the person enrolled in that course.

Given current restrictions on using technology such as online proctoring services (more on this later), it is indeed correct that there is no way to ensure that an online student completing a take home exam is the person enrolled in the course. This is a legitimate concern as COCI is trying to ensure academic integrity in final exams, but the rationale used in the policy – “to ensure that the person taking the examination is the student receiving credit” – does not make sense because there is no way to verify that *any* take-home exam is completed by the student enrolled in a course, whether that course is offered in a traditional face-to-face format, hybrid, or online.

The Need for Reevaluating this Policy

Growing Number of Online and Hybrid Courses

As a direct result of programs such as the UC Office of the President's Innovative Learning Technology Initiative and UC Davis's own Provost Hybrid Course Award program, there are now over 30 hybrid and online courses offered annually at UC Davis, many offered more than once per year. As a result of such programs, an additional 12 courses are actively being developed and set to be offered during the upcoming 2015-16 academic year. An unknown number of others are being developed outside of these programs. Over the last academic year alone, over 3,000 students enrolled in a UC Davis hybrid or online course. While still a minority of all the classes offered at UC Davis, online and hybrid courses are steadily growing and are serving an ever-increasing population of students annually.

Maintaining Academic Integrity in Examinations

With this growth comes the challenge of ensuring academic integrity in courses where in-person faculty and student interaction time is lessened (in the case of hybrid courses) or practically eliminated (in the case of online courses). Summative assessment of most students in university courses primarily takes the form of one or more midterms and/or a

final. Indeed, the Academic Senate has required (except for a few exceptions) that all undergraduate courses must have a final examination, take-home (except for online courses) or in-person.

It is admittedly difficult, at least without technology such as online proctoring, to determine that the person taking an exam in an online course is actually the person registered for the course. However, faculty face this challenge even in traditional, face-to-face courses. Unless a faculty member opts for measures such as scanning all student IDs and comparing them to a roster (as Professor Liz Applegate does in her Nutrition 10 course that serves over 1,000 students each quarter), a faculty member cannot know for sure that the person sitting for an exam is actually the person signed up for the course. There is currently no requirement to verify student identity in any courses (F2F, hybrid, or online) because to require as much would present a logistical nightmare; in most courses, we just trust that the person sitting for an exam, or taking the course for that matter, is who they say they are, which is why UC Davis has an established Code of Academic Conduct for its students.

Unique Needs of Students Attracted to Online and Hybrid Courses

Although high-quality online and hybrid courses are still relatively new to UC Davis (and most other Research 1 universities), they are proving popular among the general undergraduate population as they open up new and different learning opportunities. For many of our full-time students, that means an added convenience for a busy schedule, which can help improve their time to degree; in addition, faculty teaching online courses have reported a larger number of non-traditional and non-residential students as well:

- international students who either want to experience a UC quality course before coming to campus or want to continue their UC education while spending a quarter in their home country;
- students completing a quarter abroad;
- student athletes who require a more flexible schedule due to practices and games;
- students located at a great distance from campus who cannot commute;
- students with documented disabilities that prevent travel to UC Davis, who need more time to understand material in a course, or who require isolation to do well in a course;
- full-time working students who require a more flexible schedule due to work responsibilities;
- parents of young children who can't afford childcare but who want to continue their UC education;
- students from other UCs who choose to enroll in a unique course of interest not available at their home campus.

Faculty Time Coordinating Exams

Because neither take-home exams nor online proctoring services are permitted in online and hybrid courses, the burden for scheduling exam times has been placed upon the instructor(s) teaching the course. This burden is significant and costly.

While faculty do try to schedule exams ahead of time and give students plenty of notice on when and where the exam will take place, as is required by current UC Davis testing policies for online courses, invariably that time will not work for *all* students. One could argue that it is up to the student to arrange her schedule or to drop the course, but that logic really flies in the face of our overall mission of trying to reach and educate more students, which is one of the great promises of online education.

Faculty want what is best for their students, and so rather than take the hard line noted above, most faculty work with students to find accommodations. This includes scheduling alternate testing times for large groups of students when a room is not large enough or a time does not prove workable for many students. Invariably, some students face unique challenges either with time, or more often, with their physical location, such as when they live at a great distance from the university, challenges that require more demanding measures. Naturally, coordinating such accommodations, and proctoring the resulting exams, takes time.

Arnold Bloom (see the faculty supporting statements below) has noted that in the seven times he has taught his Global Climate Change online course, he has had to arrange for eight separate offerings for each of his exams, which adds roughly 30 hours to the teaching of the course between e-mails, phone calls, proctoring (or arranging for a proctor), and coordination with the registrar's office to find a classroom. That's an expensive 30 hours that he could have better spent assessing students, doing research, or writing up findings – responsibilities he was actually hired to do.

Professor James Carey notes a similar situation in his statement. Just in his last class offering, Dr. Carey had to arrange for three different testing times that met the needs of the majority of his students; but he also had eight special individual testing situations he proctored while in his office, 20+ students from other UCs had to make their own proctoring arrangements, nine UC Davis baseball players had to have their coach proctor an exam while on the road, and a student based in Taiwan used the honor system due to a lack of proctoring facilities.

As Professor Carey notes in his statement, “A policy originally developed for concerns about cheating in online courses that was applied universally (one-size-fits-all) has created a plethora of scheduling problems as an outcome of one of the very features that attracts many students to enroll—anytime/anyplace learning.”

Recommendations to Modify the Online/Hybrid Testing Policy

Take-Home Exams Should Be Allowed at Faculty Discretion

Faculty who teach online and hybrid courses should be granted the same privilege they enjoy in their traditional, face-to-face courses and be allowed, at their option, to administer take-home examinations. While it is impossible to determine if a student completing a take-home examination is the same student enrolled in the course (regardless of delivery format), instructors trust their students to take the Code of Academic Conduct seriously and will complete take-home exams honestly. There is no reason that this same level of trust between instructor and student should not be extended to students who opt to take a course online.

Furthermore, faculty could take advantage of organizations such as the Center for Educational Effectiveness (CEE) and Academic Technology Services (ATS) that have resources and staff at the ready to support faculty wishing to design take-home exams and other assessments that discourage cheating and allow the instructor to identify inconsistencies in student work across different assignments. Many faculty teaching online courses already avail themselves of the resources and staff in these two organizations and would be willing to continue to work with them in order to learn more about designing effective take-home exams that evaluate students on higher-order thinking skills, and thus discourage cheating.

It should be noted that UC Davis is currently the only UC that explicitly bans take-home exams in online and hybrid courses. All other UCs allow for faculty to assign take-home exams in their courses, with an implicit understanding that they are allowed in technologically-enhanced courses such as online and hybrid courses as well.

In establishing the current policy, the COCI has inadvertently and unduly made assessment in online courses unreasonably difficult for UC Davis faculty. As this need not be the case, we propose removing this barrier and allowing take-home exams in online courses in the same manner in which they're allowed in face-to-face courses – at the option of the instructor teaching the course.

The Role of the Testing Center Should Be Expanded

Faculty teaching online courses who prefer to offer exams in a live, proctored setting and do not want to offer exams in the take-home format suggested above require more support to meet their assessment goals. One way this could be accommodated is through a testing center.

UC Irvine and UCLA both have an established testing center on their main campuses. Additionally, UC Riverside, UC Santa Cruz, and UC San Diego have testing centers associated with their extension programs that UC matriculated students can also use.

Likewise, 12 CSUs and 31 California community colleges, including Sacramento State, Sacramento City College, and American River College, have established testing centers (though as noted above, only ARC is an NCTA member available for UC Davis students).

UC Davis Undergraduate Education has established a working, pilot testing center currently located in Haring Hall, and has trained undergraduate proctors at their disposal. This welcome first effort in establishing a testing center at UC Davis should be encouraged and expanded to include options for online and hybrid courses.

One such approach might be to allocate more space/time to the testing center to allow more flexibility for faculty wishing to send their online students there to take a test. In addition, the trained student proctors could also be deployed where required for multiple offerings of an exam in support of an online course.

Additionally, a testing center coordinator position could be established (either a new hire or additional/differentiated responsibilities for an existing hire) to do much of the legwork in coordinating testing for an online course. An online instructor could let this coordinator know the needs for their exams for an upcoming quarter, and then the coordinator could ensure adequate space and times with the registrar for the administration of the exam for the majority of students and then work with the students needed additional schedule accommodations for an alternate offering of the exam in a large room or for smaller, controlled offerings in the Haring Hall testing center.

Online Proctoring Services Should Be Investigated

Online proctoring services provide a structured and secure way to remotely proctor students while taking an exam or completing an assignment through the web. The UC Davis Academic Senate COCI invited one company, ProctorU, to present to them back in 2012, but after the presentation there was no report to campus, and no real further investigation into ProctorU or any other online proctoring vendor at that time.

Since 2012, the online proctoring space has exploded. Today many online proctoring vendors offer a variety of services, methods, and price points, all of which can work nearly seamlessly in conjunction with a university learning management system (LMS). ProctorU continues to be the most popular (if expensive option), but alternative companies, such as Examity, ExamSoft, SmarterProctoring, VoiceProctor, and ProctorFree, just to name a few, could be explored.

All of these companies provide a secure platform, offering some form of identification checking solution to verify that a logged-in student is who they say they are. These services are designed to make sure cheating is mitigated, and in many cases, completely eliminated in a process that is made transparent to the student and instructor. In most cases, the proctoring goes unnoticed by a student to make their exam-taking experience, from a technical standpoint, as stress-free as possible.

Presently, UC Davis is the only UC not currently using or piloting any online proctor service. Between July 1, 2014 and July 1, 2015, UC Irvine and UCLA administered 3,469 and 2,862 exams respectively through the ProctorU service. UC Online (which also handles online proctoring on behalf of UC Riverside) has administered 564 exams during the same time frame using ProctorU. UCs at Santa Cruz, Santa Barbara, San Diego, Berkeley, and Merced have become more recent ProctorU partners (some as recent as just a few months ago), and thus have administered far fewer exams, but thus far all are happy with services offered by ProctorU.

This information is presented not to suggest UC Davis adopt ProctorU based on all other UCs adoption or even necessarily piloting it as a platform (indeed there are other options, and perhaps multiple options that should be considered); rather the point is that right now, in 2015, secure and reliable online proctoring services exist and are increasing in use at our peer UC institutions (not to mention other peer Research 1 institutions throughout the country) with great success. However, it should be noted that the current ProctorU contract with UCOP does include a “piggy-back” clause that UC campuses can use to their favor.

We recommend that UC Davis explore online proctoring services to see if one or more of these solutions would also work well at our institution. Several UC Davis online instructors would be interested in piloting.

Conclusion

Hybrid and Online courses represent a growing and important segment of the courses offered at UC Davis. They provide an opportunity for UC Davis to expand its reach, including globally in online courses, in order to better fulfill its educational mission by increasing access to high-quality education to students from all walks of life and improving time to degree for many. However, current examination policies have made the logistics of offering such a course difficult.

It is time to revisit the online and hybrid course examination policies currently in place at UC Davis and consider repealing the current ban on take-home exams that traditional courses have as an option, and to seriously consider exploring the variety of modern online proctoring services that exist to ensure academic integrity.

The developing and teaching of online and hybrid courses is already a challenging endeavor for faculty who are willing to explore this option; UC Davis should not add to their burden by requiring that students take an in-person proctored exam while alternative and reputable alternatives exist for those faculty interested in utilizing them.

Faculty Supporting Statements

Statement from Arnold Bloom, Ph.D., SAS 25V Global Climate Change Instructor:

I teach an online course SAS 25v Global Climate Change that has been featured in UC Davis Magazine

(http://ucdavismagazine.ucdavis.edu/issues/win13/classroom_to_go.html), CAES Outlook (<http://viewer.zmags.com/publication/6bc8f268#/6bc8f268/14>), and on the front page of the LA Times (<http://www.latimes.com/nation/la-me-uc-online-20131222-story.html>). This course, during the seven times I have taught it, has more than met the expectation that online courses increase access to higher education. Indeed, I venture to state that each offering of the course has allowed more than a dozen students complete their degree in normative time. This includes:

- many students who had scheduling problems because other courses;
- several new mothers who participated in the course while they were tending their child (they just turned off their microphone and camcorder);
- several professional athletes who competed for teams outside the Davis area;
- several students who had to leave the Davis campus because of family emergencies or health issues;
- several seniors who needed just one course to graduate but were offered their dream job in NYC, Chicago, or Hong Kong;
- students with disabilities that were much more comfortable at home than in a lecture hall;
- students who began internships away from the Davis area; and
- students who enrolled in UC Davis Quarter Abroad but found the course offerings on these foreign campuses too limited.

All of these students suffered from the Academic Senate requirement that online courses have their exams be proctored in person on the UC Davis campus or at one of 300 approved testing centers. Most locations do not have a testing center within a day's drive, and these testing centers charge about \$50 to proctor an exam. Moreover, because the course has no fixed meeting time, scheduling an exam is a nightmare. For each exam, I must arrange for an average of 8 separate places and times for the students to take the exam. This requires an average of 30 hours in extra work for me per exam.

This Academic Senate requirement was imposed during the height of the panic about MOOCs (Massive Open Online Courses). Since this threat never materialized, it is imperative to review this policy immediately.

Statement from James R. Carey, Ph.D., SAS 7V Terrorism and War Instructor:

Mandated proctoring for midterm and final examinations for an online course like mine (SAS 7V—Terrorism and War) creates major obstacles and additional costs (often \$35-50) for students and places logistical burdens on instructors and TAs. The policy creates disincentives for students to enroll and for instructors to create new online courses.

A policy originally developed for concerns about cheating in online courses that was applied universally (one-size-fits-all) has created a plethora of scheduling problems as an outcome of one of the very features that attracts many students to enroll—anytime/anyplace learning.

Without a fixed class period, a class of 100-150 students like SAS 7V has nearly an equal number of schedules to accommodate for on-campus students. Therefore, multiple testing periods and classrooms must be open and, with my course, these classrooms must be able to have large bandwidth to handle the online testing. This is particularly difficult for the midterm when most classrooms are already scheduled. Off campus students face different but equally difficult challenges for test-taking.

Examples from this quarter:

- Single mother had to arrange and pay for both day care AND proctoring service
- 20+ students who were enrolled from different UC campuses each had to make (mostly) separate proctoring arrangements
- Two UC Davis students were sisters interning on remote horse ranch in Florida far from proctoring services
- Non-matriculated student in Taiwan (who paid \$1,400) was clueless on where to find proctoring service (I ended up using honor system)
- Nine members of UCD baseball team in course were on road during final exam; assistant coach ended up proctoring in hotel.
- Email from student: “I am working full time Monday-Saturday 7:00-5:30 PM in Visalia, CA. I live with my brother and a roommate. I don't know any teachers but I do have parents who can proctor.”
- Logistics of emails arranging proctoring for instructor (myself) and TAs were substantial (e.g. 25-40 email exchanges for arranging proctoring for each exam—midterm and final)
- Midterm for on-campus UCD students required three different testing times, special classroom for wifi plus 6-8 different special cases (i.e. individual scheduling in instructor's office).