

Dear Summer Term Instructor

One of the many challenges for instructors over the past two terms has been trying to decide the best method for assessing students in a remotely delivered environment. To complicate this further, some instructors are also trying to decide how to monitor remote assessment sessions. When delivering a remote exam, there are four monitoring dimensions that need to be considered. The choice of which dimension(s) to select is up to the instructor, and depends on the type of assessment:

- Identity validation - captures the identity of the person taking the exam
- Academic integrity of the physical environment - monitors the student and the student's physical environment
- Academic integrity of the online/computer environment - monitors and reports on activities on the student's computer
- Exam and question security - does not allow the student to copy and save exam questions

Some of these dimensions may not always have to be monitored based on the type of exam being run, or the comfort level of the individual instructor. For example, some instructors may provide a timed open book exam through eClass and may only need to validate the identity of the student writing. Other instructors may have “throw away” questions, so they may not care about question security. Still other instructors may allow their students to use internet resources during the exam, so they may not care about monitoring online activity.

IST provides tools in eClass that can be used for exam monitoring. The latest tool we are introducing is Smart Exam Monitor (SEM). SEM is a Chrome-browser web application that utilizes our own U of A infrastructure and allows instructors to remotely monitor a student's physical environment during an exam session. SEM is integrated with eClass but does not have to be used specifically with eClass exams. It provides the instructor a dashboard for monitoring the students writing the exam. As students progress through the exam, SEM will automatically flag different conditions (e.g. if a cell phone is detected, if voices are detected, or if the student leaves the picture). The instructor can then review those indications and clear the flag, or leave the flag for evidence. We have had some success with SEM in the Spring term, so we are expanding the pilot to anyone in the University that wants to take advantage of it in the Summer term, with no charge.

The characteristics of SEM are:

- SEM is a technology that assists instructors in the monitoring of remote exam sessions.
- SEM provides video files and session flags that can be reviewed by the instructor. SEM also allows instructors to interact with the exam session through a dashboard of the students that are writing. It does not provide instructors with an overview report at the end of the session but does provide full videos for detailed review on demand.
- SEM is AI enabled so it will flag false positives that instructors will have to check and clear or accept (this is especially true for exams that allow or use paper).
- SEM monitors the student and their physical environment during the exam session and provides some lightweight monitoring of online activity on the student's computer (e.g. websites visited). For more robust monitoring of the student's computer, SEM must be combined with Examlock

which forces students to remain in the exam window. Please see below for more information on Examlock.

- SEM is self-serve: instructors must set up their own SEM sessions. The eClass team will provide instructions and support, but will not set up exam sessions for instructors.

In the following, we describe several options for conducting remote exams. Please keep in mind that there is no software or vendor that can completely guarantee remote exam security.

Remote Exam and Monitoring Options

Please Note: eClass does have some built in exam security features that can be used in most eClass exam sessions. To read more about those features, [click this link](#)

Option 1 - Alternative assessment or open-book eClass exam staged over a flexible time block.

- Method - CTL has provided suggestions for [this type of assessment](#) and they are available for consultations on how to convert existing assessments.
- Support - Assessments of this type create the fewest barriers to student access and have the fewest technological limitations and are often carried out in eClass which is fully supported.
- Fees - Charges may apply depending on the delivery method chosen by the instructor, but use of eClass is free.
- Monitoring - This style of exam does not provide any of the four types of monitoring noted above. Instructors should be aware that exam questions could be copied.

Option 2 - Smart Exam Monitor (SEM)

- Method - Instructors use eClass or another exam delivery method and use SEM to monitor the exam session.
- Support - eClass exams and SEM are supported by the eClass team. Other exam delivery methods are up to the instructor to support; SEM may be able to be used in these scenarios.
- Fees - Charges may apply depending on the delivery method chosen by the instructor, but eClass and SEM are free.
- Monitoring - provides identity validation, monitoring of the student's physical environment, and some lightweight monitoring of the computers online activity. Does not provide question security or full monitoring of the student's computer activity.

Option 3 - eClass exam combined with Examlock

- Method - Instructors use eClass and [Examlock](#) to deliver their exam.
- Support - eClass and Examlock are both supported by the eClass team.
- Fees - eClass and Examlock are free.
- Monitoring - provides some identity validation through CCID access; reports on the student's online and computer activities; provides some question security, although students could take pictures on their phones or screen recording programs. The physical environment is not monitored.

Option 4 - eClass exam taken through Examlock and combined with Smart Exam Monitor

- Method - Instructors use eClass and Examlock to deliver their exam and combine it with Smart Exam Monitor to monitor the session.

- Support - eClass, Examlock and SEM are all supported by the eClass team.
- Fees - eClass, Examlock, and SEM are free
- Monitoring - provides identity validation, monitors and reports on the student's computer activities, monitors the student's physical environment, and provides some question security with the exception of screen recording programs.

Option 5 - eClass exam or another exam delivery platform, combined with a paid remote proctoring service RPNOW

- Method - Instructors use eClass or their own delivery method and combine it with the remote proctoring service, RPNOW.
- Support - Access to the remote proctor is set up through eClass, and technical support is provided through the RPNOW vendor. Not recommended for exams that require the use of paper to facilitate the exam, Please see option 2.
- Fees - RPNOW charges \$3.50 US per exam per student. Fees will be charged back to Individual Faculties, so Dean's approval is required. Other charges may apply depending on the delivery method chosen by the instructor.
- Monitoring - all four types of monitoring are supplied, but only 25% of the sessions will be audited and reported on. All session videos are available for instructors to review.

Registering for a Remote Proctoring/Monitoring Service

If you are interested in using one of the two services (SEM or RPNOW) you will need to fill out the attached form. Both SEM and RPNOW will be offered in summer term. SEM is a free service and RPNOW will require your Dean's approval. Please fill out the form for each individual exam you are providing e.g. one for your midterm and again for your final.

The form will close at the end of business Friday June 26th.

<https://docs.google.com/forms/d/1wZ2Y38yHhCjIUUPbzDu5glUztXfMS8h0SHNWl56woiw/edit>

If you have any questions please don't hesitate to email or call eClass at eclass@ualberta.ca 780-492-9372 for more information.

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