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Academics & Services Spring/Summer Report

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Data Collection

The data and feedback in this report was collected in two primary methods:

1. Discipline Club Feedback, primarily collected at the July 2020 Academics Committee meeting of the ESS Board of Directors (BoD)
2. Direct Student Feedback, collected through the ESS Spring/Summer Survey in early August 2020

Discipline club feedback is vital to the ESS' academic advocacy, as these clubs are well versed in the specific feedback on discipline classes, the impact of academic changes on their students, and more generally have a strong presence with their students. Relaying this feedback to the Faculty ensures that no disciplines are left behind, and that the specific interests of each discipline are addressed.

Our primary method of collecting feedback for advocacy, however, is through public surveys. A well advertised survey allows students a free platform to express their concerns with academic issues, and to garner a wide range of perspective and feedback.

This year's spring/summer survey was responded to by over 50 students, with a wide range of years and discipline clubs represented.

Discipline Clubs

Clear Communication

Clear and concise communication on exam and homework formats, lab procedures, and class expectations has never been more crucial than in the COVID-19 era. Students, especially first years, are facing a brand new format that will differ considerably from professor to professor. It is up to the student to fulfill the expectations of the class, and our students are more than capable of doing such, but have to be aware of what is expected of them beforehand. The following were brought up as potential solutions taken in the past by professors:

- Clear syllabi detailing the weightings of assignments, due dates, and lecture/exam formats
- Regular communication via email/eclass when changes come up during the course
- Available office hours (format feedback in the Spring/Summer survey)

Communication from the faculty was also brought up as a crucial item by the discipline clubs. The announcement made by the faculty regarding the status of Fall 2020 as entirely online was clear and easy to follow, and this type of communication is vital to event planning, and more generally to peace of mind, especially with the pending status of Winter 2020.

Design Classes

Design courses like MecE 260 and 360 heavily revolve around use of the machine shop and hands on design. Transitioning these courses online is extremely challenging, and it's difficult for students to gain the full experience of the classes through this method. A potential solution could be found through resequencing, as these classes are only prerequisites for each other.

Lab Access

This concern was brought up by a member of the Petroleum Engineering Club, currently enrolled in CHEM 371. As this class is conducted by the Faculty of Science, it is one of the labs being held in-person. The exception to this; however, is that engineering students enrolled in the class are not given the option to participate in an in-person lab, but rather must conduct the lab remotely. While it is understood that the Faculty of Engineering is not conducting any in-person labs, for classes like this the infrastructure is in place to allow for an in-person lab, and it would be feasible to allow engineering students the choice to participate in it.

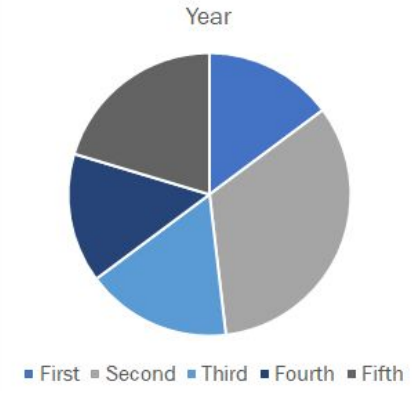
Class Size Caps

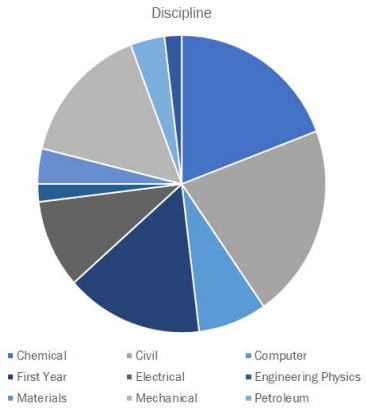
With classes being online, a common thread was that class sizes should be raised somewhat, especially to accommodate co-op students unable to find placements with the state of the economy and job market. This would allow students to make progress on their degree when unable to work, without the typical ramifications of large classes (overcrowding in lecture halls, limited lab spaces, insufficient numbers of TAs).

Spring/Summer Survey

A Diversity of Opinions

The Spring/Summer Academic Survey captured opinions from a broad range of students across all years and disciplines. This ensures our feedback is representative of the entire student population.





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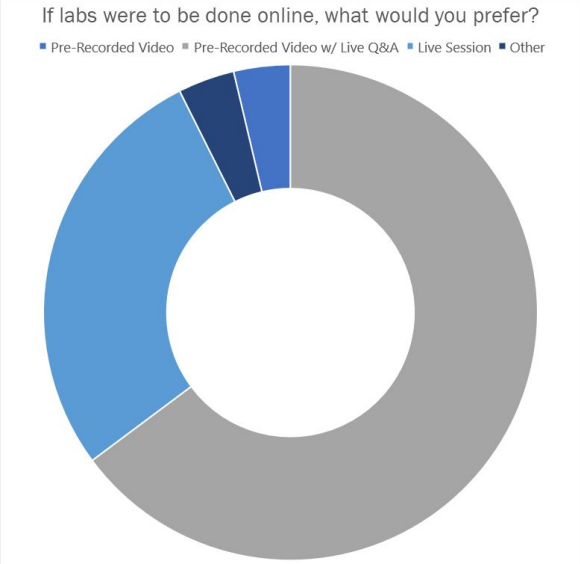
Lectures

At 61.1% of responses, pre-recorded lectures were the overwhelming preference in delivery method. This allows students to manage their time as they choose, provides flexibility for professors, and most importantly allows international students to study and learn at a time when they can still interact with friends and family.

"I can access the lectures at any time, and can work on the content when I have time. This gives added flexibility to students especially those working and those in other parts of the world where time differences hinder them to access live lectures. Moreover, students could refer back to the lectures while revising"

Labs



Following a similar theme as with lectures, providing an option for students to watch the labs provides for much more flexibility. The option for a Pre-Recorded Video with a Live Q&A allows students to prepare for and be able to conduct the lab, while TA's are there to support students with any issues they run into. Provided TA's are available via email, students are given maximal opportunities for assistance, while maintaining significant flexibility in scheduling. Live sessions can be highly limiting for students in different time zones, with different living situations, etc.

"For labs I found it was very helpful to have pre recorded instruction videos that you could pause and rewatch and then the live q&a sessions to ask any questions"

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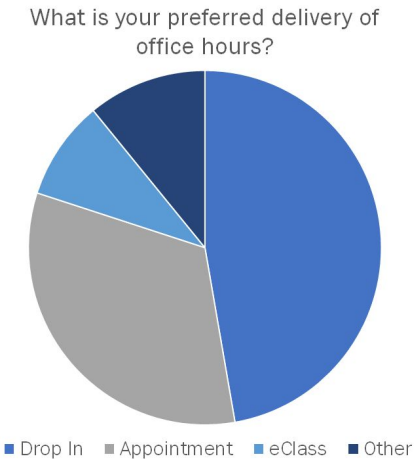
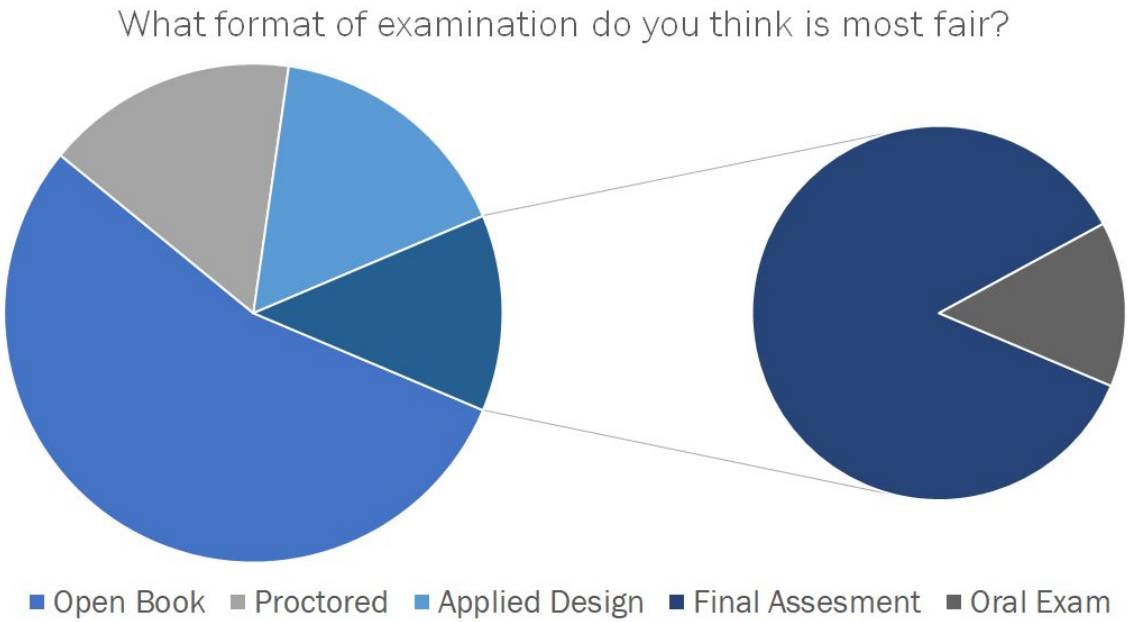
Office Hours

Office hours are a crucial component of online learning, allowing students to reach out to professors when they need help. The preferred methods for delivery of these sessions are drop in sessions and by appointment, very similar to existing in-person office hours, just transitioned online. Options such as via eClass forum and email were posed in the survey, but were scarcely chosen as a primary choice. Being able to have an actual discussion with a professor is quicker, more thorough, and results in a better learning experience for all involved.



Examination Formats



While open book exams were a majority of votes, a more important takeaway is the dislike of proctored, closed book exams, at only 16.4% of selections. The issues with these rigid formats range from equipment (availability of webcams, microphones), privacy, availability of a quiet working space, and time zone. For classes where an applied design problem is possible, this option is ideal, allowing students equal

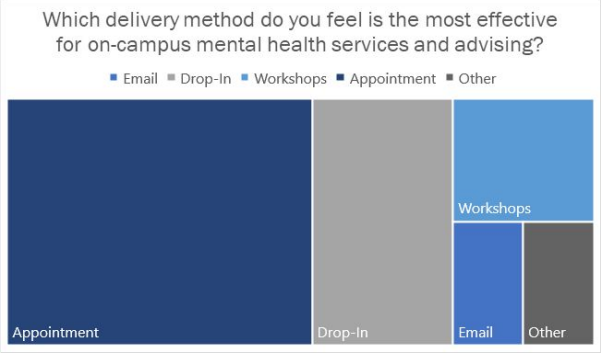
opportunity to complete the assignment at their own pace. For classes where this is unfeasible, an open book exam/extended assignment allows for flexibility, and mitigates the problems of proctored exams.

Addressing the weighting of final exams is also a potential solution to increased stress on exams. By reducing the weighting of exams, professors have more flexibility to ensure student understanding and comprehension through labs, assignments, and quizzes.

Note: The following quote is from a student who selected "Applied Design Problem" as their preferred examination method

"It is the only type of exam that can be logistically planned in a fair way. It is also a way to enforce what you are teaching by getting students to apply if. Why is engineering following the same examination format that science follows? Teach our students how to be engineers, not students."

Mental Health Services



A key insight gained through this question is that students are in need of one on one mental health services. The ESS is planning on providing several mental health workshops throughout the year, but when it comes down to it, being able to set up an appointment with a councillor/psychologist is crucial for student well being, especially in a time such as now.

General Feedback for the Faculty

"[It would be great to see] more ways for students to connect online to ask for studying help. Ask the profs to allocate time to reach out to students or answer emails to help bridge the communication gap. So many students ask questions after lectures, a lot of students will miss that and their understanding will suffer"

"Allow some in person activities, especially labs and seminars. Even if they're optional these can do a lot to help with students understanding"

"More design projects. Less assignments and exams. Flexible deadlines"

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"Consider international students in all decisions (eg. Make a firm recommendation on group work – whether it is equitable for group projects to exist and if group work is deemed necessary how then can it be done properly)"

"Ensuring that older and less technology-oriented professors have the proper support to deliver their courses effectively. While I may not have been on the receiving end of this, my siblings had a handful of professors who were unable to teach properly because they had difficulties using technology"

"Encourage profs to go beyond reading from and posting a PowerPoint. This is an opportunity to introduce new methods of collaboration through online breakout rooms and doc sharing. As well as using things like videos, polls, and (non marked) quizzes to keep students engaged"

The ESS Approach

The ESS has a number of initiatives and programs aimed at addressing some of the issues raised by the student body, including but not limited to:

- The Study Buddies' program, intended to connect first and second years with their peers, forming peer study groups and helping each other academically
    - Includes a kick off event with a presentation from the Academic Success Centre discussing effective remote learning
- The Mentorship program, aimed at connecting first year students with senior students to help guide them through the first year of their degree
    - Including a kick off and follow up event with the EEC discussing professional development issues
- Mental Health workshops, including our first confirmed workshop with the Sexual Assault Centre on October 8
- Excel Workshops, aiding students in learning this crucial skill for numerous industries, especially when a strong professional skill set is as crucial as it is
- Continued advocacy through surveys, discipline club outreach, and potentially an office hours program with the VPs Academics & Services
    - The Faculty can expect follow up reports for the Fall and Winter semesters, discussing the year in progress and taking the temperature of the students on academic issues

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Key Takeaways & Final Word

I sincerely hope this report has been informative in the major academic concerns and comments our student body is facing this year. It will be a challenging year for all in the Faculty, but along with that comes a significant opportunity to embrace the possibilities that online learning provides. Here are the key takeaways from our student feedback:

- Solid communication on class expectations and formats will allow students to prepare both academically and mentally, and generally feel more comfortable with the year
- Pre-Recorded lectures and labs are crucial for this upcoming Fall semester, particularly with students from a wide range of time zones tuning in
- Availability of Professors and TAs to help with assignments, labs, and general questions is key to student understanding like in any normal semester
- Finding a non-traditional examination format that addresses the numerous outlined concerns with proctored exams will help immensely with student stress and overall fairness (Applied Design Problems and Extended Final Assignments are posed as potential solutions)
- Consistent and available mental health services and advising is vital to making students feel comfortable and looked after while learning remotely
- The Faculty and ESS will play particularly key roles in ensuring that the wellbeing of the students is maintained in these challenging times, and new initiatives and ideas will help immensely

We hope to see all parties continue to strive to improve the academic year of the student body, and hope these comments and suggestions will help the faculty in this shared goal. If you have any questions, comments, or concerns about this report or action being taken by ESS Academics & Services this year, please do not hesitate to contact me at essserv@ualberta.ca.

Sincerely,

Adrian Wattamaniuk
VP Academics and Services
Engineering Students' Society of the University of Alberta