School of Engineering Science and ESSS Semesterly Meeting - SP23

Meeting Date:
   January 21st, 2023

In Attendance (In-Person):
   Dr. Michael Sjoerdsma - Director, School of Engineering Science
   Boris Perdija - ESSS President
   Colton Koop - ESSS VP Academic
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Opening Statement

The Engineering Science Student Society and the Department of Engineering Science are working hard to accommodate all ENSC students to the best of their ability. We have been in contact with each other these past few weeks to make sure that all students are continually supported and that their voices are heard. I would like to thank everyone who sent in their feedback as it provides us with the opportunity to work towards solutions.

Brief Note

- All decisions were made while considering academic integrity, feasibility, and student feedback.
- Anything not mentioned here is still being considered within the department and faculty.
Future ENSC 151 Changes

What improvements will be made to ENSC 151 as it is a new course?

As ENSC 151 was a brand new course for the department, a couple of imperfections were expected and FAS is aware of some of the issues faced by its students. The director has mentioned that the course will be looked at to provide better assignments and an overall improved curriculum.

Course improvements are a common topic and, as mentioned in the fall report, the Faculty of Applied Sciences typically holds bi-annual reviews to ensure professors and instructors are adequately teaching classes at SFU. Students are strongly encouraged to fill in their student experience surveys to provide feedback, especially since response rates are generally extremely low.

Beyond feedback surveys, students should go directly to the ESSS’s VP Academic with any concerns or suggestions they might have. This information does get brought up directly to the director and it has previously been extremely helpful for the department to see what areas there are for improvement.

Future ENSC 252 Changes

In the fall 2022 semester, ENSC 252 had a number of issues including little study material, difficult lectures, and general student dissatisfaction with the way the course was conducted. Is there anything the department is looking into regarding this class in the future?

On top of the suggestions provided for ENSC 151, with regards to ENSC 252 in particular, Dr. Sjeordsma has stated that he will take these concerns and meet with the professor to discuss ways the course can be improved in the future. These improvements will hopefully include more materials and better assignments to guide students to success.
Issues with ENSC 316

[PARAPHRASED] ENSC 316 was a poorly structured course with too heavy of a course load; too much theory and few examples; and provided little support for exams. The resolution of student advocacy this term was disappointing, and the move to making this course a C+ to C- pre-requisite for ENSC 416, while sought after, ended up affecting the mark scaling and negatively impacting students.

ENSC 316 has been an area of concern for the Fall semester and changes were made in an effort to make it more reasonable for students. During the discussion with the director, it was stressed that the department does not tell instructors how to teach or scale. The director further expressed that it is entirely up to faculty members to decide whether or not they provide answer keys.

In the discussion, Mike further mentioned that he does not believe the C+ pre-requisite will ever come back.

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With regard to the handling of student advocacy, we understand that not every situation can be solved perfectly. We ask that you please see the statement from the ESSS’ VP Academic attached to the email sent out alongside this report.

Can [Professor] teach ENSC XXX?

Can Ash teach ENSC 225?

FAS understands that students may wish for a certain professor to teach a certain class, however, teaching assignments need to be balanced across each of the professors/instructors. If a certain professor gets assigned to teach one class, they will lose out on teaching another class.

Further, as course scheduling can become a large issue, a lot of times certain professors are chosen due to being the most optimal option. As a result, not much can be done to push for a certain professor to teach a specific class.
Can CMPT XXX Count as an ESD?

*Can CMPT 479 count as an ESD Elective for Computer Engineering?*

The process of adding additional ESD electives for the various concentrations has proven to be an arduous process due to various accreditation requirements. Specifically, the Canadian Engineering Accreditation Board (CEAB) dictates the minimum requirements that need to be met in order for SFU’s engineering program to remain accredited. Presently, the courses we take in our program are placed in various determined Academic Unit (AU) categories, and all AU categories must be fulfilled in order to graduate in engineering. Additionally, CEAB dictates that a certain number of courses need to be taught by a P. Eng. Due to these constraints, the pool of approved ESD electives for each concentration becomes limited, and some concentrations end up being more harshly punished than others.

With regards to additional CMPT ESDs, it is difficult for new courses to be approved due to the fact that they are not taught by professional engineers.

Michael Sjoerdsma requests that students email him if new CMPT courses come to exist, which may possibly be added to the list of approved ESDs. Additionally, if you had any that interested you in particular, you can also get in touch with the ESSS VP Academic at [academic@esss.ca](mailto:academic@esss.ca) where this will ideally be brought up either to the computer engineering option head, or at the next UCC meeting.

Multiple Course Offerings

*Can ENSC 416/426 (or other ENSC courses) be held more than once a year?*

Unfortunately, it is not likely that these courses (ENSC 416/426) will receive multiple offerings in a year.

In general, double offerings are rare since there are not enough faculty members to double dip, and so multiple offerings only occur when it warrants the cost to the faculty. As ENSC 416/426 isn’t for most people, it isn’t likely to be considered. Classes such as ENSC 225/251/252 are much more likely.
Update on Planned Course Offerings

In the last meeting, it was stated that there were long-term course projections coming soon, but we haven’t seen this yet. Are there any updates?

In the Summer 2022 report, the engineering department was noted to be working on a two-year plan for students in engineering which was slated to be finalized by the end of the summer semester.

Dr. Sjoerdsma has stated that the faculty of applied sciences still have these plans, as well as a draft 2-year plan, but that he will follow up on this.

FAS Website Updates

Please update your websites.

As of January 21st, FAS was conducting interviews for a vacant position that would handle FAS website updates. The website will be looked at across the board once a person is hired. No additional information was provided.

3D Printers in ASB

3D printers seem to be ready to use in the ASB now. When will students actually get to use them? Will it be modeled similarly to the library 3D printers?

In general, access to the 3D printers will be controlled by the dean’s space, and the space is noted to not be quite yet ready to use as FAS just moved into the offices on the top floor recently. FAS is currently working on the final touches to AV equipment, and an issue with data lines is mentioned which may be causing these delays. Dr. Sjeordsma has noted that he will follow up at the dean’s level to see what the plans are.
Mechanical Engineering at SFU

Why doesn’t SFU have Mechanical Engineering?

The decision surrounding which engineering concentrations are taught at SFU dates as far back as when SFU was first opening its doors as, at the time, there were genuine concerns regarding how SFU would compete with UBC.

In the early 80s, it was decided that microelectronics was a field that we could excel in when compared to the competing school, and this concentration was later expanded to include systems engineering. As time went on, Computer, Biomedical, and Physics engineering options were also added.

With regards to mechanical engineering, SFU would need a substantial amount of extra money and capital to cover the costs of adding this concentration.

It is more likely that SFU will focus on “Quantum” technologies in the future, and for more traditional engineering schools, UBC and UVic would cover those far better.
Closing Remarks

As a closing note, I would like to thank you for making it this far and reading this report. The Engineering Science Student Society truly appreciates all of the submissions made by our students and we are happy to have been able to bring them up with the acting director. Your voice can make a difference in the faculty and we appreciate your efforts to make our department as great as it can be.

If there are any further concerns you have that were not discussed in this report or you would like further details on a section, please do not hesitate to contact me at president@esss.ca. Additionally, if this report did not address your specific concern, and your concern is time-sensitive, I encourage you to reach out to Dr. Sjeordsma directly and he will assist you with your specific case.

As this will be my last meeting with the director during my presidency, I wish to thank the student body for allowing me to act as a liaison between you and the department. It was truly an honor to support my fellow engineers.

The next meeting with the director will occur next semester with a new executive team, and a survey should be released for students to submit their concerns sometime early in the summer.

Once again, thank you all for your submissions and for reading this report. The ESSS is proud to represent you in all aspects of the Engineering Science Program. We wish you the best for the rest of your semester.

Sincerely,
Boris Perdija