

Instructor Report for Summer 2025 - ENSC 470/894 Combo - Optical and Laser Engineering Applications, Shawn Sederberg

About the Instructor Report: The purpose of the Instructor Report is to provide a detailed look at your students' learning experience as measured by the Course Experience (CE) survey. This feedback can be used to inform teaching practice and course design. It displays student responses to all questions (common core, discipline) including the ones that you may have added to the survey via means, standard deviations, frequency distributions, and comments. The Instructor Report is viewable only to you as the instructor of the course so that you can use personalized questions and feedback to inform your unique inquiry.

The Centre for Educational Excellence (CEE) provides consultations on course, curriculum design, and teaching practice and are available to help you interpret and apply student feedback from the CE Survey.

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Creation Date: Thursday, August 28, 2025

The following course sections were combined into one survey and report: ENSC 470/894 Combo - Optical and Laser Engineering Applications

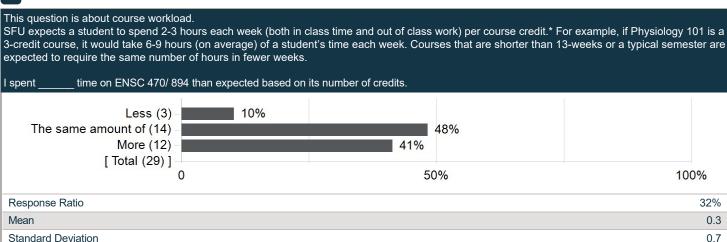
Section 1 - Response Rate

Raters	Students
Responded	29
Invited	92
Response Ratio	32%

Section 2 – Common Core Questions

These questions appear on all course experience surveys at SFU and are selected by the Provost.

2.1 Course Workload



The mean score summarizes the overall reported workload for this course and can range from -1 to 1. It is scored as: Less time than the expected= -1, The same amount of time as expected= 0, More time than expected= 1, given the SFU definition of a credit. The closer the mean score is to 0, the more it means that students reported the workload to be the same as expected.

2.1a You responded as having spent less time on ENSC 470/ 894 than expected. Please explain.

Comments

Heavy course load during the semester.

Shawn explained everything right and easy to understand

2.1b You responded as having spent the same amount of time on ENSC 470/894 as expected. Please explain.

Comments

Lab reports, assignment, design projects

12 hours a week is a reasonable amount for this course

I spent about 8-12 hours per week on this course as expected from the course credits.

It was a reasonable workload for a graduate level course.

The course content was not too difficult as to require extra work outside of class, yet was not too easy as to require less attention than expected.

I was spedin time by doing worksheets, assignmnets, projects, lab and study for midterm.

The materials provided for the course were sufficient and easy to understand. Each week, we had one worksheet, which was usually completed during class. In addition, there were assignments that required more time and effort outside of class. I spent most of my time working on the lab reports for this course. Overall, the workload was manageable.

Assignments and lab work can be quite lengthy.

The lab reports can be quite lengthy at times and the design projects also take a decent amount of time, but overall the workload is fair.

The timeline and course assignments were fair.

its a 4th year course and I spent 4th year time on it, no surprises here

2.1c You responded as having spent more time on ENSC 470/894 than expected. Please explain.

Comments

The amount of work in this course was overwhelming.

I spent more time on ENSC 470/894 than expected because the topics are technically complex, required detailed calculations and simulations, and needed extra effort to meet the project and exam requirements.

Too many things due. There are weekly tutorials, bi-weekly asignaments and labs, and on top of this two design projects. It is very hard to keep up with the content when there are so many deadlines to meet. Oftentimes found this class to expect more than all my required classes.

I had 2 disabled teammates for the projects who prioritized capstone and just left everything behind for the rest of us.

The material in this course was not the most challenging, but the volume of material was very high. The design projects, particularly project 1, were very time consuming.

The addition of two projects on top of the lab work was more work than expected for this course.

With the added design projects this year, I spent a lot more time on this course than I anticipated.

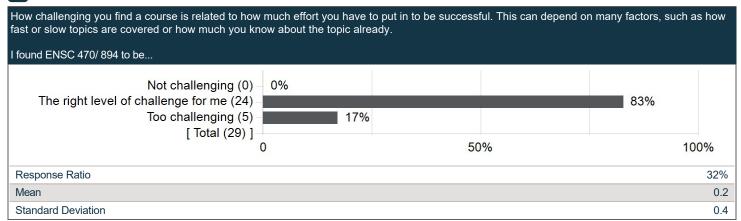
There was a large degree of assignments, projects, labs and tests that increased the time spent on the course to a little bit more then expected.

Labs and project reports were very helpful in understanding the concepts well; however, they were very time-demanding, as well as the assignments.

Difficulty of the material and the amount of content/submissions we had to do was unrealistic and too condensed.

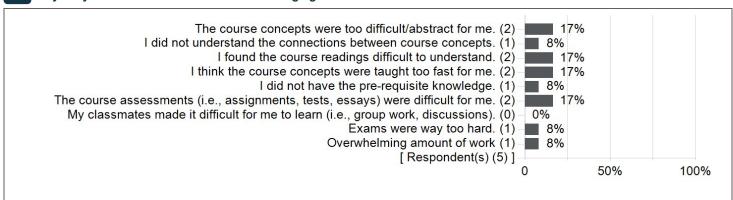
There were a lot of labs and design projects. I understand adding in the design projects to retain engineering accreditation, but I think the labs and assignments should have been toned down in return, as the design projects added a lot of school work which we aren't necessarily familiar with as we were unfamiliar with open ended projects.

2.2 Course Challenge



The mean score summarizes the overall perceived level of challenge for this course and can range from -1 to 1. It is scored as: Not challenging = -1, The right level of challenge for me = 0, Too challenging = 1. The closer the mean score is to 0, the more it means that students reported that the course was the right level of challenge for them.

2.2b Why did you rate ENSC 470/894 as too challenging?

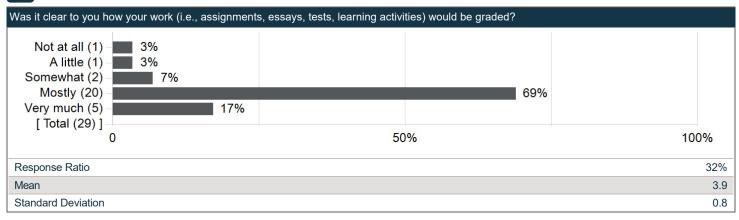


Note: Students were provided with a list of reasons to select with the option of adding an open-comment reason. Students could select multiple reasons.

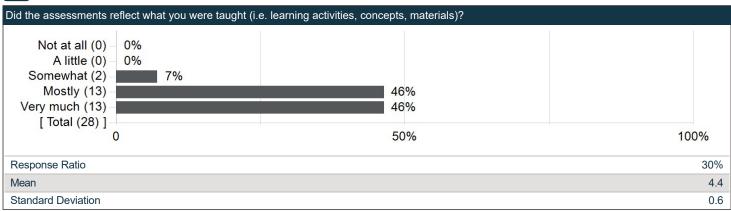
2.3 Assessments

For Q2.3a and Q2.3b, the mean score can range from 1 to 5. It is scored as: Not at all = 1, A little = 2, Somewhat = 3, Mostly = 4, Very much = 5

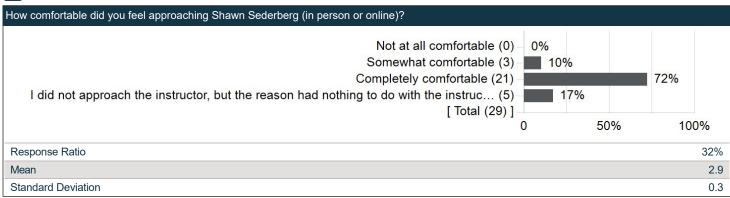
2.3a



2.3b



2.4 Comfort Approaching Instructor



The mean score summarizes the overall reported level of comfort approaching the instructor and can range from 1 to 3. In contrast with questions Q2.1 and Q2.2, 1 represents one end of the scale (Not at all comfortable), while 3 represents the other end of the scale (Completely comfortable). The middle of the scale is 2 (Somewhat comfortable). Responses for "Did not approach..." were excluded from the mean score.

2.4b You responded as having felt somewhat comfortable approaching Shawn Sederberg. Please explain your response.

Comments

He seems knowledgeable about the topics mentioned during class, however the TA during the tutorial sessions went over most of my questions.

Speaking to professors in general scares me but I did approach Shawn at some point

2.4c You responded as having felt completely comfortable approaching Shawn Sederberg. Please explain your response.

Comments

Shawn answered my questions about the assignments and design projects clearly. He's friendly and easy to talk to.

he is very friendly and helpful

I felt completely comfortable approaching Shawn Sederberg because he is approachable and very supportive.

Shawn is very open to talk to. I am comfortable approaching him.

Shawn was a great instructor and welcomed all questions. He was also approachable, and helpful during his office hours.

Dr. Sederberg is very polite and answers questions quite well, usually walking one through the necessary steps to understand a concept, or provide a sufficient foundation to answer a problem. He is also very accommodating when it comes to deadlines, as he takes into consideration other class/life obligations and will adjust deadlines accordingly.

Prof. Shawn is a very kind and supportive instructor who genuinely understands and respects his students. The course material was challenging, particularly the midterm and the project designs, but this is appropriate for the level of the course and pushes us to grow as engineering students. In my opinion, Shawn is a professor who truly values and respects his students.

We had office hours every week and could always find him in his office. Whenever he was unable to attend his scheduled office hour, he would post an update on Canvas and arrange an alternative time.

Understanding prof., no complaints here.

Office hours were encouraged and offered both online and in-person for full accommodation.

Dr. Sederberg is a great lecturer and he never makes students feel dumb for asking dumb questions

Prof. Sederberg is very approachable and helpful during office hours.

Shawn had consistent office hours which I used to ask questions about the topics being covered. He also recorded his lectures through Zoom and reassured us that if we missed the class for whatever reason, we could request a copy of the recording. Overall, he really cared about his students and their success.

Chill guy

Shawn Sederberg was very opening and had set time slots for office hours

Shawn's an awesome instructor, and his explanation skills are awesome, even tho his lectures are pretty intensive, his examples are sufficient to understand the material

Shawn was always available to reach out to and knowledgeable to explain the course material. Very easy to approach and provided a welcoming environment

Shawn was very approachable throughout the entire semester.

2.4d You responded that you didn't approach Shawn Sederberg, but the reason had nothing to do with their approachability. Please explain your response.

Comments

Group members approached instructor for questions

N/A

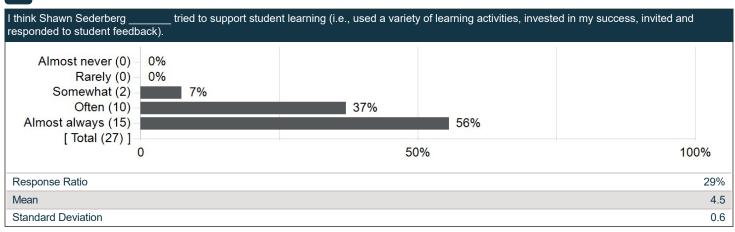
I felt no need to approach him for questions and the like.

Didn't want to.

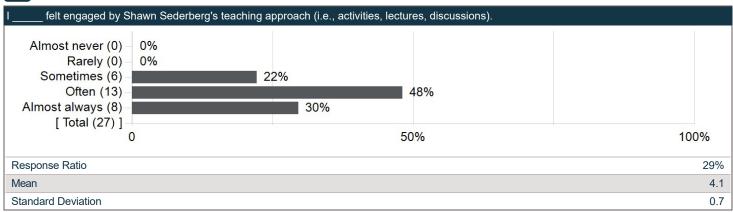
2.5 Instructor

For Q2.5a - 2.5c, the mean score can range from 1 to 5. It is scored as: Almost never = 1, Rarely = 2, Sometimes/Somewhat = 3, Often = 4, Almost always = 5.

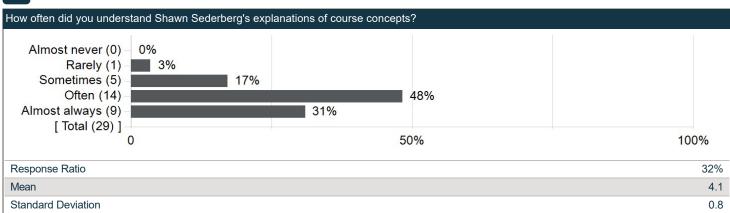
2.5a



2.5b



2.5c



2.6 Which aspects of ENSC 470/894 helped you learn and why?

Comments

Examples in class (tutorials)

I found the labs pretty informative in learning practical design and measurement methods. I learned about a new software and a practical method of measuring laser beam width, assignments did a good job of covering concepts learned in lecture.

The tutorials and lectures were straightforward

Lab assignments and especially TA tutorials helped further explain the concepts.

The hands—on simulations, detailed problem—solving exercises, and application of theory to real optical systems in ENSC 470/894 helped me learn because they made me understand concepts, improved my analytical skills, and connected coursework to practical engineering scenarios.

The tutorial questions he gave in class were useful to understand what topics were taught in lecture.

Lectures, Labs, Assignments were well prepared and worked well together to illustrate the concepts taught.

The homework provided questions that pushed the limits of our knowledge, requiring us to really understand and apply what was taught in class, or to expand our knowledge. This had the effect of allowing me to learn the course content better, and to extend it further beyond.

I felt like the labs were just following instructions but I did learn when writing the lab reports. Sometimes what was expected in reports was not taught in class such as analysis.

I believe the best part of the course was the worksheets and the presence of both the teacher and the TA in class, always ready to answer our questions. Besides, the TA tutorials were also helpful.

Homework, labs, tutorials - homework was relevant to the course, tutorials kept us in check every week.

Lecture slides were concise and summarized most of the information needed to tackle problems, though some assignment questions were extremely challenging.

The emphasis on practice problems were great for becoming familiar with calculations and concepts.

The variety of teaching methods in this course did lots to support my learning. Tutorial worksheets, in–class hardware demos, labs, projects, and TA tutorials come together to provide a strong foundation for learning.

As with most courses, I found the projects to be the most valuable part of this course. Project 1 required students to become skilled with the ZeMax optimizer and use to to create a lens that was practical and deployable. This emphasis on practicality and having the project motivated by a real world example was refreshing compared to projects from other courses which are purely about design and maximizing performance in a simulation. Real engineering often requires making sacrifices such that your design can actually be manufactured with real machines that exist today.

I think more courses should incorporate this philosophy in their projects. The entire life cycle of a product needs to be considered, from ideation to design to deployment to maintenance to replacement,

Shawn's tutorials every week carried me through this course. I felt that without them, it would be more difficult to bridge course concepts with assignment/exam questions. The labs were also very helpful in demonstrating practical applications of lasers.

The assignments were very useful in understanding the course contents

tutorial and assignments were very helpful, as well as the labs

Tutorials and Homework.

Shawn always brought great practical visuals in class and the labs I learned were very practical techniques used in research.

The tutorial's helped the most, as the leap from lecture to assignments and exams felt very large, so having an opportunity for someone to help me through problems was very beneficial.

tutorials and in class examples since they showed how to go about solving some problems

2.7 How would you improve ENSC 470/894 for future students?

Comments

Less lab/design projects

spreading lab times more evenly across semester. labs didn't start until I believe week 3-4 but the last 2 labs had due dates 1 week apart

Probably tell them to keep up with the material

NA

Have the homework and tutorial more align with midterm content

Either make the labs shorter, or allot more time, as I found the labs to veer on the longer side to a point where my group struggled to finish everything within the given time. I do, acknowledge, that this could have been a problem on our end, in which case the labs do not need changing.

Design projects introduced this semester did not feel helpful to learning or design, they were more trial and error and took up a lot of time during midterm season. For the first design project I didn't feel as if i learned anything it was just like lab 2 but the time you spent on it just corresponded to how lucky you were in adjusting your parameters.

I think we need like a PHYS dept. format where they forced us to watch videos on the theory before we come to class, that way we kinda have a foundation for what's going on. The majority of people I spoke to got lost after Jones Matrix and are still lost. I think after this point is when it starts to get difficult so we need visuals or like more explanation just to get the foundation and start building from there. I mean the course is great, we just need more background.

Lab two manual can be made more direct regarding how many analyses we were supposed to have (very many – our report ended up being overly lengthy due to how many screenshots were needed).

I think the pace of the course is a little slow because so much time is allocated for the tutorials and worksheets. I still think they are quite invaluable, but I believe decreasing the allotted time a little bit, perhaps 5 to 10 minutes, will allow more material to be covered. I don't think the decrease in time will be very impactful either because the worksheets are quite simple and straightforward so they don't require that much time to complete.

Compared to most other courses, this one is basically perfect. Dr. Sederberg is doing everything right and he needs to keep doing what he is already doing.

The design projects I felt were a bit much although they were very helpful. I would have liked to have one major project instead of two smaller ones because towards the semester, things get very busy and a second design project during that time adds a lot of stress.

The lab reports were particularly lengthy and often very repetitive.

please reduce the workload, it was too much this semester

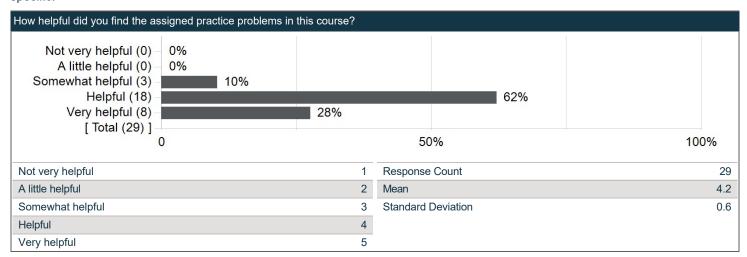
Less lab/project material.

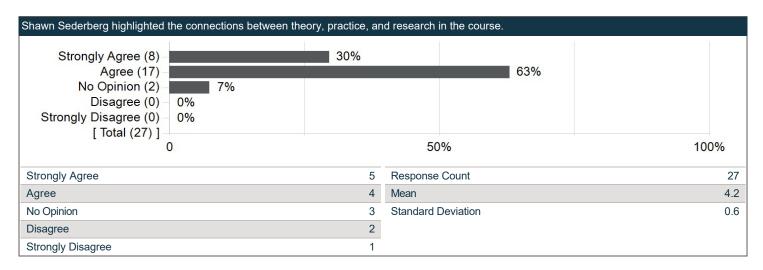
N/A

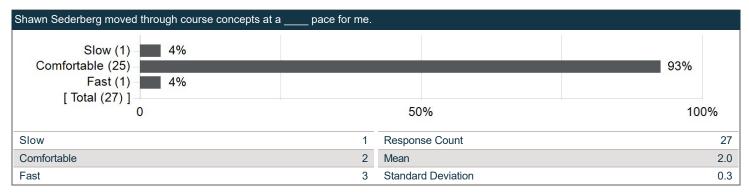
I just really like example problems so Id suggest more of them

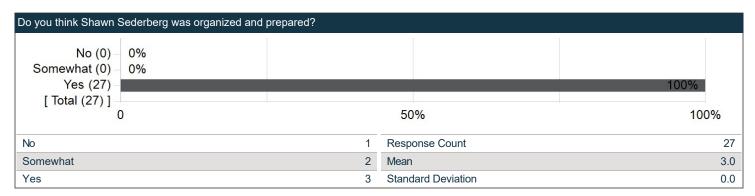
Section 3 - Discipline Questions

These questions were selected by your department/school and reflect inquiry about student learning experiences that are discipline-specific.









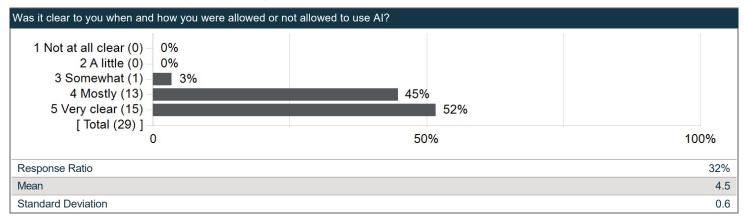
Section 4 - Instructor Selected Questions

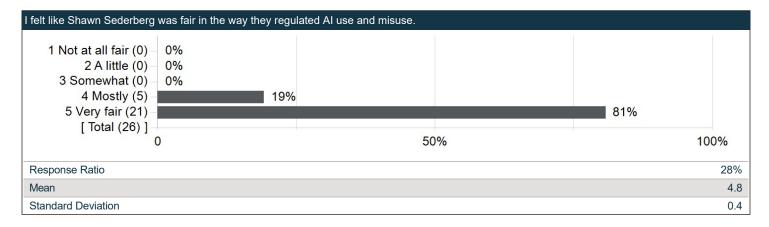
This section displays the responses to the questions you selected/created. If you did not submit any questions, this section will be blank.

The mean score for instructor selected questions can range from 1 to 5. There are three scoring scales: Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1
Very Good = 5, Good = 4, Fair = 3, Poor = 2, Very Poor = 1
Very Easy = 5, Easy = 4, Average = 3, Difficult = 2, Very Difficult = 1

Section 5 - Course Context Questions

These questions reflect university/faculty strategic initiatives, the academic plan or course delivery models.





Do you have any further comments about how Al impacted your experience?

Comments

Statement of AI use in lab reports

Difficult topics were easily tackled through the use of AI, especially during the 2nd half of the course.

ΝΙΔ

To any meaningful effect, Al did not impact my experience, as it was only used as (in many cases) more effective search engine.

Can't really AI simulations which is a major component of this lab, so not a lot of AI use here but that's just me.

N/A

The "statement of AI use" section in the project is an excellent way to deal with AI in the classroom. AI use was permitted and encouraged, but exact examples of what is and is not okay were not provided. I feel like by this point in the degree, me and other students have an intuitive sense of what constitutes academic dishonestly.

awesome experience

Al was never brought up in class.

No

nope