

myExperience Report

Term 2, 2024

Faculty: Faculty of Engineering

School: School of Computer Sci & Eng

Course: COMP6131 Software Security Analysis

Evaluation period: Jul 22 2024 12:00AM - Aug 8 2024 12:00AM

Course Report

Response Data

| Raters | Student |
|----------------|---------|
| Responded | 24 |
| Invited | 43 |
| Response Ratio | 55.8% |

Comparison of results for "Overall I was satisfied with the quality of the course"

This course: COMP6131 Software Security Analysis

| Overall I was satisfied with the quality of the course | | | | |
|--|-------|------------|-----------------------------|-------|
| Options | Count | Percentage | Statistics | Value |
| Strongly disagree | 0 | 0.0% | Mean | 5.50 |
| Disagree | 2 | 8.3% | Median | 6.00 |
| Moderately disagree | 0 | 0.0% | Standard Deviation | 1.18 |
| Moderately agree | 1 | 4.2% | Standard Error (base on SD) | 0.24 |
| Agree | 2 | 8.3% | % Agree broad | 91.7% |
| Strongly agree | 19 | 79.2% | | |

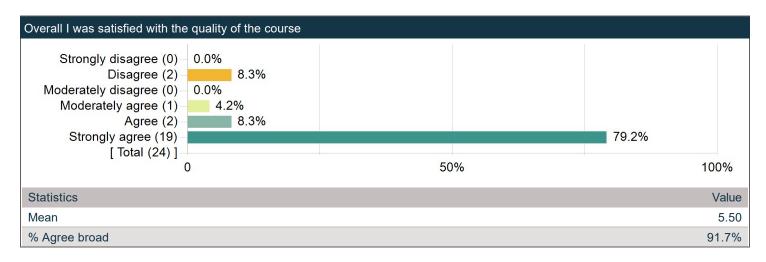
SCHOOL: School of Computer Sci & Eng

| Overall I was satisfied with the quality of the course | | | |
|--|------------|-----------------------------|-------|
| Options | Percentage | Statistics | Value |
| Strongly disagree | 2.3% | Mean | 5.05 |
| Disagree | 2.5% | Median | 5.00 |
| Moderately disagree | 4.0% | Standard Deviation | 1.15 |
| Moderately agree | 13.7% | Standard Error (base on SD) | 0.01 |
| Agree | 34.2% | % Agree broad | 91.2% |
| Strongly agree | 43.3% | | |

FACULTY: Faculty of Engineering

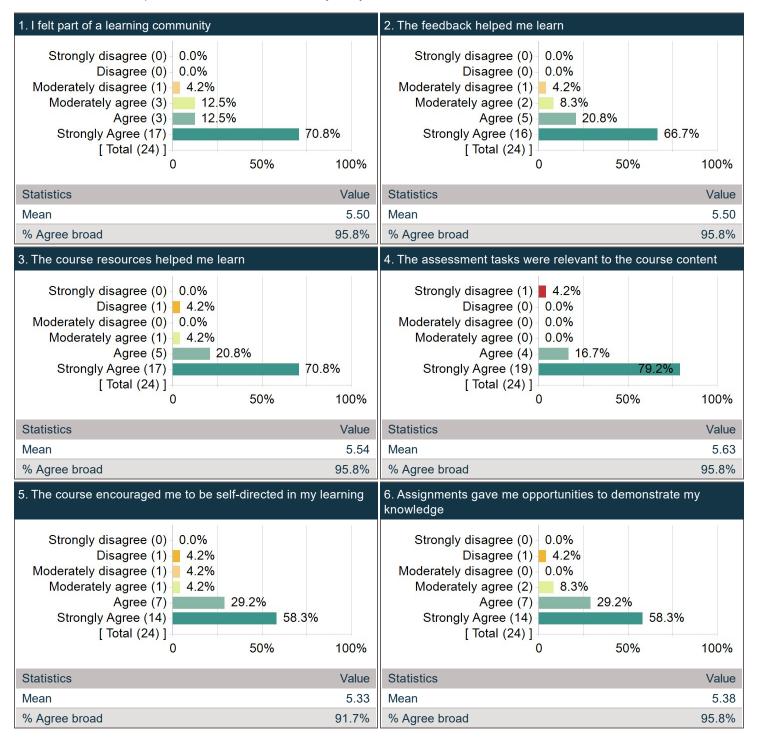
| Overall I was satisfied with the quality of the course | | | |
|--|------------|-----------------------------|-------|
| Options | Percentage | Statistics | Value |
| Strongly disagree | 2.5% | Mean | 5.05 |
| Disagree | 2.7% | Median | 5.00 |
| Moderately disagree | 4.1% | Standard Deviation | 1.17 |
| Moderately agree | 13.2% | Standard Error (base on SD) | 0.01 |
| Agree | 33.2% | % Agree broad | 90.8% |
| Strongly agree | 44.3% | | |

Overall I was satisfied with the quality of the course



The table below shows the percentage of 'Agree' and 'Strongly agree' responses to the question 'Overall I was satisfied with the quality of the course'

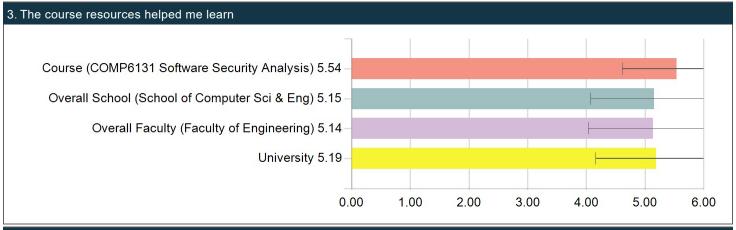
| Overall I was satisfied with the quality of the course | |
|--|-------|
| Statistics | Value |
| % Agree | 87.5% |

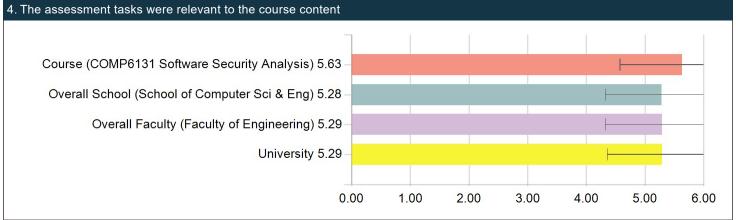


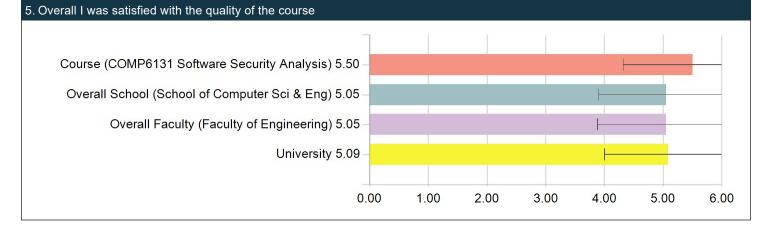
Comparison Statistics

Mean (average student responses between 1 and 6) and StandardDev (Standard deviation of student responses) are used for comparison statistics between Course, School, Faculty and University.

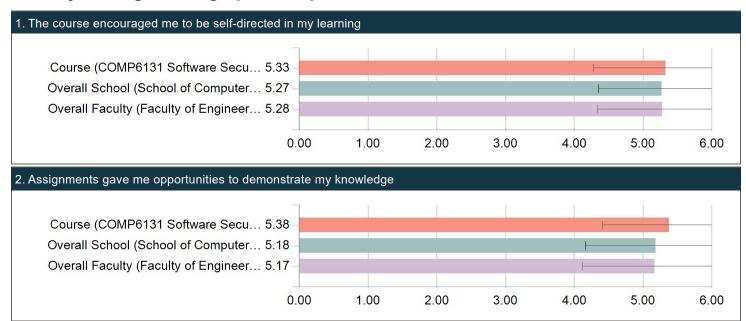








Faculty of Engineering specific questions



Raw Comment Data

What were the best things about this course?

Comments

This course provides excellent practice for using static analysis in source code analysis and verification. It offers a comprehensive and hands—on approach to mastering the techniques and tools necessary for ensuring code quality and security. The curriculum is thoughtfully designed to cover a wide range of topics, from fundamental principles to advanced methodologies, making it suitable for both beginners and experienced developers. Through practical exercises and real—world examples, students gain valuable experience in identifying and mitigating potential issues in their code, leading to more robust and reliable software. Overall, this course is an invaluable resource for anyone looking to enhance their skills in static analysis and improve their software development practices.

Weekly quizzes encourage us to do self-study.

The structure and connection of the class content are introduced clearly at the beginning of every class to help understand.

Very well-designed structure. The progression of difficulty is smooth.

Hello, To anyone who concerned about it.

I wanted to express my appreciation for the Software Security Analysis course (COMP6131) taught by Prof. Yulei Sui at UNSW. There were several outstanding aspects of this course that made it a truly enriching and valuable experience.

1. Expert Instruction:

Prof. Yulei Sui's expertise and passion for the subject were evident throughout the course. His lectures were not only informative but also engaging, making complex concepts in software security analysis accessible and interesting. His ability to connect theoretical knowledge with practical applications significantly enhanced my understanding.

2. Comprehensive Curriculum:

The course was well–structured, covering a broad range of essential topics in software security analysis. From foundational principles to advanced techniques in automated code analysis and verification tools, each module was thoughtfully designed to build on the previous one, ensuring a cohesive learning journey.

3. Hands-On Learning:

One of the best aspects of the course was the emphasis on practical, hands—on learning. The assignments and projects allowed us to apply what we learned in real—world scenarios, developing our own code analysis tools. This approach not only solidified our understanding but also equipped us with valuable skills that are directly applicable in the field.

4. Supportive Learning Environment:

The pre–course survey and Prof. Sui's proactive approach to understanding our learning needs made a significant difference. The learning environment was supportive and inclusive, with ample opportunities for students to ask questions, participate in discussions, and seek help when needed.

5. Real-World Relevance:

The course content was highly relevant to current industry practices and challenges in software security. Prof. Sui incorporated recent developments and case studies, providing us with up-to-date knowledge and preparing us for real-world applications.

6. Interactive and Engaging Sessions:

The weekly lectures were interactive, with a good balance of theoretical instruction and practical demonstration. The use of real-life examples and case studies made the sessions more engaging and relatable.

7. Excellent Resources:

The course materials, including lecture notes, readings, and online resources, were comprehensive and well–organized. They served as valuable references throughout the course and will undoubtedly be useful in the future.

Overall, COMP6131 has been an exceptional course that exceeded my expectations. Prof. Sui's dedication to teaching and his expertise in the field made it an invaluable part of my academic journey. I feel well–prepared to tackle challenges in software security analysis thanks to this course.

Thank you, Prof. Yulei Sui, and everyone involved, for making this course such a rewarding experience.

The course materials are clear and easy to understand.

The assignments effectively helped me grasp the course content.

Additionally, the grading was done quickly.

Comments

The responses on the Ed forum were also very timely.

Contentwise its amazing, very much in my area of interest, and the lecturer seems to know the content.

The labs and quizzes were generally pretty solid, though the quizzes needed some refinement wording wise (understandable for its the first time being ran)

The labs did feel a bit too easy - could've been extended more in this aspect

The workload of the course is well balanced and the assignments and labs are relevant to the course content. The labs and assignment are also connected to each other which means that you doing the labs gives you a good introduction to the assignment.

ED forum questions responses were very quick and helpful. I like being able to discuss the assignment, quizes and labs during the lab session.

I liked that the assessment structure included mainly assignments and no exams. Since the course introduces very new topics, assignments make it easier to learn the content easily. I also like how the labs and quizzes directly related to the assignments. It made the course more enjoyable rather than tedious.

Projects were amazing and really well put together, as well as highly relevant to the course.

Very good and interesting content.

The lectures covered content well and were engaging. The course admins were similarly strong and the course ran extremely smoothly, with content released on time with reasonable deadlines.

What could be improved?

Comments

Lectures spoon-feeding assignments with pseudo code.

Am I learning software security analysis or SVFIR API

A lot of self-learning is required.

- 1. Some quizzes/assignments require material that is introduced after the quiz/assignment is due. For example, a concept is often introduced in the Friday lecture/tutorial, and the related coding assignment is due the following Wednesday. This is a bit rushed.
- 2. In the Lab 1 quiz which is due on Wednesday of Week 3, there's a question that covered a concept that was only introduced in the Friday slides of the same week.

I think that the assignments need to be re-designed.

We have the algorithms for all the assignments just given to us, meaning we just had to implement them like code–monkeys, and the main difficulty was stated to be figuring out the API with SVF.

I think that work should be done to make the APIs apparent, and then leave it to the students to figure out the correct algorithms, such that they are forced to have a deeper, 'correct' understanding

This also frees up some lectures that were just going through pseudocode, to cover more theoretical content

The lectures feel kinda dry at some points, and could benefit from a 5 min break in between the lecture.

It was also exhausting to attend 4 hours of lecture + lab on the same day, so it might be easier for students to attend the labs, preferably on another day as 4 hours gets very exhausting

I think that back–to–back lectures and labs make the lessons too long and students will tend to lose focus. Maybe having labs and lectures on different days would be better.

It doesn't feel like it is too focused on Software Static Analysis. But rather feels more like learning to use SVF.

Too much handholding given for the assignments.

Felt more like a SVF course, than generally being software security analysis.

I thought course assignments were way too easy and took too little time. Would have been nice to be able to code something nontrivial.

For the later two assignments, I feel like less pseudocode would have increased the learning experience as it would have required us to think more deeply about exactly what we were implementing. I think Assignment 1 got this balance right (the labs/quizzes were fine though, especially quiz 1).