

Description of Your Report

Your Course Evaluation Report contains up to four sets of items, represented in up to four sections in your report, described below.

Sets of Items

Institutional Items

These eight items are consistent across the University of Toronto. They are comprised of:

- Five rating-scale items which represent institution-wide teaching and learning priorities.
 - **The institutional composite mean, a mathematical average of these first five items.**
- One rating-scale item on the overall quality of a student's learning experience.
- Two qualitative comment items.

Divisional Items

These items are consistent across your division. They represent division-wide priorities for teaching and learning.

Departmental/Program/Course-Type Items

These items (when applicable) represent further levels of granularity and specificity for teaching and learning priorities within your division (e.g., department, program, course type).

Instructor-Selected Items

These items are optional items which may be selected from the item bank by instructors during the question personalization period.

- **Note that the results from these items are only reported to instructors, as they are primarily intended to function as personal formative feedback.**

Report Sections

The following provide different statistical summaries and representations for your institutional, divisional, and departmental/programmatic items (where appropriate).

Section 1: Course Evaluation Overview

Provides all course evaluation data except instructor-selected items.

Section 2: Response Distributions and Additional Statistics

Provides detailed response distributions.

- The number and relative percentage of respondents providing a given answer is provided, along with a graphical representation.
- This section also reports further statistics for each set of items relative to Section 1.

Section 3: Comparative Data

Provides comparative means for your course as compared to the relevant means across *all other evaluated courses at a particular level of comparison (e.g. division, program)* for each set of items.

Section 4: Instructor-Selected Items

Provides data for optional items that instructors can select from the item bank during the question personalization period. This section is formatted identically to Section 2.

Statistical Terms Used in this Report

Mean: The mathematical average. This measure is the most sensitive, and can be greatly affected by extreme and/or divergent scores.

Median: The middle value when all responses are ordered. This measure is less affected by extreme and/or divergent scores.

Mode: The most frequently occurring score.

Standard deviation: A measure of the "spread" of the data.

Course Name: Fund of Robotics Automated Sys CSCC85H3-F-LEC01	Instructor: Francisco Estrada
Division: SCAR	Section: LEC01
Session: F	Delivery Mode: INPER
Session Codes: F = First/Fall, S = Second/Winter	

Raters	Students
Responded	35
Invited	42

Section 1: Course Evaluation Overview

Part A. Core Institutional Items

Scale: 1 - Not At All 2 - Somewhat 3 - Moderately 4 - Mostly 5 - A Great Deal

Question	Summary	
	Mean	Median
I found the course intellectually stimulating.	4.5	5.0
The course provided me with a deeper understanding of the subject matter.	4.5	5.0
The instructor (Francisco Estrada) created an atmosphere that was conducive to my learning.	4.6	5.0
Course projects, assignments, tests, and/or exams improved my understanding of the course material.	4.2	4.0
Course projects, assignments, tests and/or exams provided opportunity for me to demonstrate an understanding of the course material.	4.3	5.0
Institutional Composite Mean	4.4	-

Scale: 1 - Poor 2 - Fair 3 - Good 4 - Very Good 5 - Excellent

Question	Summary	
	Mean	Median
6. Overall, the quality of my learning experience in this course was....	4.3	5.0

7. Please comment on the overall quality of the instruction in this course.

Comments
The professor creates a great learning environment that provides theoretical knowledge and applications.
It's awesome and one of the best I have ever taken
To be honest, this course was somewhat not what I had expected. I was more so expecting a low-level engineering course where we build embedded systems or real robotic devices using boards, circuits, and other raw materials. This course had lots of starter-code, an already-made EV3 brick and sensors, so we didn't really get to experience building these things (the lecture notes do cover a little bit of the overall concept). In robo-soccer, the localizing, image processing, and make files are already implemented for us, and all we needed to do are to come up with high-level ideas and implement appropriate function-calling logic, which is pretty hard too. That said, I did enjoy this course because of the freedom to design our own solutions and test them out, but I think I would enjoy the course more if we built everything from scratch.
The lectures were very fast-paced—no complaints though because of the amount of material that needs to be covered. I just wish there could be an example code demo for each of the concepts.
Overall, I learned a whole lot from this course—it's like working as a partner of a company—we design and implement an algorithm on top of low-level libraries for our client Paco, there's lots of decision making and collaboration that needs to be done well with the team. I work better as a team member now than at the beginning of the semester.
11/10. Very thorough explanations and equally great opportunities to practice stuff you learnt.
Great, the assignments were difficult but fun to work.
The lectures were well taught by the professor, and the corresponding notes were very helpful.
Incredibly interesting, engaging, and knowledgeable professor.
Great course and overall fun. It was cool to implement what we learned into the EV3 robots. The course was also setup in a way to allow me to learn the most by reading the lecture notes before hand and then getting a deeper understand from the lectures.
Paco is an excellent teacher. The lectures are very interactive and feel almost like a discussion. Overall, one of the best instructors at UTSC.
This course was really great. This 3–4 months are the most fun 3–4 months in my life, and at the same time be the most stressful days. Taking this course as a second year, there was such a huge learning curve, but even though Paco made everything become interesting.
It was decent – Paco is a pretty good lecturerer
It was nice
nice
The assignments were very engaging and hands-on. I really valued the practical aspects of them, and how the concepts learned in class were directly applied to the assignments. It was very helpful to see how and why these processes were developed.
In terms of instruction, everything is clear, and easy to understand with the way the professor teaches it.
The quality of the course is very much reliant on the quality of the projects, which I will say is very nice.
The overall teaching is impressive, the concepts are explained very clearly by professor Paco. If in the future there could be some more teaching in lectures that are related to lab/project would make this course much better!
Despite me rarely attending lectures, I enjoyed the ones I went to.
The material was broken down into digestible chunks and followed by examples of real world application, which helped me absorb the material since I can immediately see how it could be used.
This course was well taught. The lectures were very interactive and had a proper structure as it was based on the notes Paco made. The lectures focussed on the theory of the concepts in robotics which were then applied to the exercises and the assignments. This course had a very high workload but was overall extremely fun especially because Paco made it fun.
Instruction was good. Being given notes before class helped with understanding during the lecture. Although sometimes Paco speaks too quickly or the board is a little confusing,
Very good. The instructor was passionate about the material, which showed through the lectures he gave. However, one's experience in the course will be greatly affected by their groupmates, so I highly recommend for anyone taking the course to take it with people they know, since most of the work in the class is group based.
Needs more help with designing and implementing robots. Alot of the time it felt that the advice given was vague.
huge workload but very good
100/10, the course was fun and was run well. The TA and professor did a great job overall of ensuring our understanding of the

Comments
content and expectations. I will say the quizzes did require a deep understanding and some revision and that students should prepare for them, as forgetting minor details or how a concept works WILL cost marks, especially since you have 0 idea of what to expect, except for speculating what the material is within it.
Engaging, material was taught in a way that was easy to understand

8. Please comment on any assistance that was available to support your learning in this course.

Comments
A lot of tutorials and practicals and office hours always available. I never went but it sounds like there was a lot available.
The teaching assistant, Malhar, would provide insightful feedback for the projects and provide new strategies as well.
Practicals
Lots of much-appreciated assistance was provided two entire afternoons per week.
Abundance of OHs
There were many office hours by the prof and TA that made it easy to get help with projects.
Labs, office hours, tutorials, etc. were all opportunities we could get great help.
Piazza was the main way of assistance in this course I used and all my questions were answered in a timely manner so it was great.
The support available was very good. The TA (Malhar Pandya) was very supportive and the Piazza for this class was always active.
Any kind of assistance are available. We can always ask in piazza, office hours, practical, or even come to paco's office when it's not at office hours and we can always get help on anything, literally anything.
Weekly lab and office hours were helpful
Plenty was provided
vert nice
Paco created a very inviting atmosphere for asking questions, discussing materials, and asking for assistance.
Yes. Professor was available during lab hours and had office hours to help facilitate ideas and put help with theory for our robots. He answered questions to his best extent, and ensured that you understand the topic.
There is constant office hour supports, along with pizzia support
The course notes and TA malhar is very helpful in this course.
The TA would often provide very useful feedback on strategies or changes to our projects if he can find glaring issues or unnecessary steps.
There many lab sessions for us to to test our assignment and ask the professor questions. He had many office hours which we could ask and we could also ask piazza if needed.
There were many OH and lab sessions. Lots of times to get help.
Office hours and tutorials provided much needed assistance. It was nice to finally not hear "Make a Reasonable Assumption"
An example robot should have been demonstrated or any sort of demonstration would have helped us out greatly.
Help was always there, the labs and office hours were great and the professor and TA were always honest and very helpful in pushing us to the right direction.
accessible office hours