

Degree/Certificate Program

Computer Science AS

Program Student Learning Outcomes (pSLOs)

To evaluate the program student learning outcomes (pSLOs), students were asked: "With respect to all of the classes you have taken at FLC toward an AS in Computer Science how well have the classes prepared you to...(each pSLO was listed)." Responses ranged from 5 "excellent preparation" to 1 "inadequate preparation". Below is a summary of the student responses by the semester the student petitioned to graduate.

| PSLOs | Total | | | | 18-19 | 17-18 | 16-17 | Spring 16 |
|--|-------|-----------|------|------|-------|-------|-------|-----------|
| | Mean | Std. Dev. | Min. | Max. | Mean | Mean | Mean | Mean |
| Design, write, test and debug computer programs, using a low-level language, a structured language, and an object-oriented language. | 4.00 | 0.85 | 2 | 5 | 3.60 | 4.50 | 4.00 | 4.25 |
| Evaluate various solutions to a proposed problem in terms of programming languages, software architecture, and other appropriate computer technologies. | 3.70 | 0.93 | 2 | 5 | 3.50 | 3.83 | 3.33 | 4.25 |
| Demonstrate a fundamental knowledge of the basic concepts that define the discipline of computer science, such as data structures, discrete mathematics, basic computer architecture, operating system internals, networking fundamentals, and programming | 4.00 | 0.85 | 3 | 5 | 3.80 | 3.83 | 3.67 | 5.00 |
| Number of responses | 23 | | | | 10 | 6 | 3 | 4 |

Additional Feedback

Students were given the opportunity to provide additional comments about their experience in the program and more broadly at FLC. Below are the questions students were asked, along with the comments provided by the students:

Please provide any additional comments about your experiences taking classes toward an AS degree in Computer Science that might help FLC improve the program.

Spring 2016

XX's C++ class and Data Structures classes were terrible. I learned more from watching Youtube videos than I did from any of his lectures or the garbage he recommended for text books.

2016-2017

A lot of students learn to solve programming problems through trial and error, and there is value to that, but sometimes it leads them to incorrect notions about how to solve a particular problem properly. I had multiple programming classes where students shared with each other the false solutions they had found, and there wasn't enough review of code by the teacher to catch all of these mistakes. I know teachers don't have time to review every student's code, and I highly value teaching students the skill of code review among peers, but in a programming class there needs to be multiple checks through a semester to catch bad coding practices. Maybe 4 small group projects evenly spread through the semester that the teacher reads in full. That means they don't have to read N programs for N students but they will catch most of the fundamental bad practices shared through the class. And they really could be small projects, with larger projects only being peer reviewed. I've seen students leave a class doing the same awful things in every program that they learned to do near the beginning, and I think teacher review of even small programs would prevent such things in the future.

2017-2018

I appreciate the availability of night classes for most courses, but I still needed to take one at ARC due to the lack of availability at FLC.

2018-2019

Don't make the first class Cisc 310, intro to computers, mandatory since most people trying to get this AS don't even realize it is a needed class because of how introductory it is.

I would like more programming, the only teacher that had us do programming was XX other then that we mainly focused on theory. XX is a very good teacher he should be leading the computer science department.

My only bad experience was with CISP 310. I took it at Sac City, however, so it would not fall under the FLC courses. XX and XX were phenomenal professors! I wish we learned more Python in CISP 300. We were allowed to complete Python assignments for extra credit, but I would've benefited a lot if it were taught in class and assigned as a required task.

Overall I felt the classes introduced and taught the concepts adaequately. However, I believe I would've benefitted from a more diverse set of examples and/or harder assignments. Not saying that the classes were too easy just that I felt my knowledge grow very slowly and questioned at times if these classes were really preparing me for a University. I guess I will get the answer to that this fall.

Throughout my education with Computer Science classes, I felt that while I learned these concepts, I did not have much structure as to how they properly mesh together, and how they fit into the industry from a career perspective. I believe that some of the classes focused on too detailed of points and did not retain a wide-scope view of the subject as a whole.

Very poor stuff. Lazy and unmotivated. Doesn't prepare students to the real world at all.

Is there anything else you would like share about your experience as an FLC student?

2017-2018

I enjoyed the campus, connection with various teachers, and will leave with memorable experiences.

2018-2019

I believe that the campus has been a great place for my junior college education.

I met some fantastic people here. I hope I can meet them again.

if there was a program to help find jobs or connect students with local employers such as other programs have, that would be amazing.

Overall I have greatly enjoyed my time here. The professors we're knowledgeable, personable, and eager to see their students succeed. While I am eager to move on I will always see FLC in a positive light.

Were there any services or supports offered by the college that were a significant support to the achievement of your academic goals?

Spring 2016

Because of the inflated costs of school and textbooks, student loans and PELL grants were invaluable. It's nice to know that my children will be paying for this meager education that's done nothing to help my career. Thanks!

The counselor helped me make sure I knew what classes I needed and pretty good at scheduling. But they need to know that some classes were only offered once a year or at certain schools

2017-2018

Communities / Clubs that helped reinforced needed knowledge

2018-2019

The Board of Governors Fee Waiver and Financial Aid.

Tutoring

tutoring center

Tutoring center saved my life

Did you experience any significant barriers to achieving your academic goals?

Spring 2016

Money, and the debt I was forced to saddle my family with so we could afford college while working a full-time job that barely puts food on the table. Not enough classes are offered fully on-line or at night after normal business hours to be able to complete my transfer requirement.

2016-2017

I have severe ADHD and problems motivating myself to do homework.

2017-2018

The changes in degree requirements.

2018-2019

Financial difficulty and having to pay for classes only with my financial aid, domestic emotional abuse, and moving during the semester.

Not interesting

Work