Computer Science Department
Registration Newsletter for Fall 2020

Registration is around the corner! Start thinking about your courses for next semester.

Advising Window: March 23 – April 6
Note: some faculty advisors may offer advising appointments before the window begins, so check your email.

Registration Window: April 7 - 17

Computer Science majors <u>must</u> meet with their academic advisors before registering for classes.
A registration hold has been placed on your PAWS account and will be removed after the advising meeting.
You will not be able to register for Fall 2020 courses until you've met with your academic advisor, who will remove your hold after the advising meeting.
Please watch for an email from your academic advisor with instructions for making advising appointments.
Check PAWS to find your academic advisor, registration date, and appointment time.

** Visit the CS Department's webpage for a list of advising resources **

Fall 2020 Options Courses

CSC 275-01: Mini Course (0.5 units) in Computer Science: Command Line Tools for the Modern Dev, M, 5:30 – 6:50 PM, Prof. Devlin
(Prerequisites: CSC 215, 220, or 250) This course does not count for Computer Science credit and can only be taken as a free elective.
This course covers command line tools used by modern development teams from startups to enterprise. It's the course that helps you to understand and apply the commands and scripts that historically you may have copied and pasted into the terminal but will have to know when you get into the real world. Students will gain hands-on experience in terminal commands, shell scripting, and popular command line interface (CLI) tools like git, aws and docker.

CSC 355-01: Human Computer Interaction, M/TH, 2:00 – 3:20 PM, Dr. Salgian
(Prerequisites: CSC 230, CSC 270, and MAT 127, each with a grade of C or higher. Non-majors may use CSC 250 in lieu of CSC 230.)
This course will cover various aspects of the interaction between computer systems and human operators. Topics covered will include the underlying principles for human computer interaction, from aspects of human perception and memory, to user interface design. The course will culminate in a final project in which students will design and implement their own HCI applications.

CSC 360-01: Computer Networking, T/F, 2:00 – 3:20 PM, Dr. Li & CSC 360-02: Computer Networking, T/F, 9:30 – 10:50 PM, Dr. Li (tentative)
(Prerequisites: CSC 230, CSC 270, and MAT 127, each with a grade of C or higher. Non-majors may use CSC 250 in lieu of CSC 230.)
This course introduces basic elements of modern computer and telecommunication networks. A hybrid five-layer reference model resembling the popular TCP/IP model is discussed. In each layer, the state-of-the-art hardware and software technologies are introduced. These include: fiber-optic and mobile/cellular communications; HTTP/WEB; wavelength/time division multiple access protocols; TCP/UDP and ATM adaptation layer protocols; network security.

CSC 448-01: Algorithms in Computational Biology, T/F, 3:30 – 4:50 PM, Dr. Papamichail
(Prerequisites: (CSC 230, CSC 270, and MAT 127) or BIO 371, each with a grade of C or higher. Non-majors may use CSC 250 in lieu of CSC 230.)
The inherent complexity of cells and organisms, combined with the wealth of life science data produced by modern high throughput technologies, make the use of computers to analyze and process this data critical, and often imperative. This is a course in algorithmic issues in biology, focusing on problems in genomics and genetics. Our emphasis will be placed on analyzing appropriate combinatorial algorithmic problems and the techniques to solve them. Primary topics include pattern matching and sequence homology, DNA sequence assembly, motif finding, gene prediction, phylogenic tree construction, microarray analysis, and RNA and protein folding.

CSC 470-01: 3D Game Development, T/F, 11:00 AM– 12:20 PM, Dr. Ferdous
(Prerequisites: CSC 230, 270, and MAT 127, each with a grade of C or higher. Non-majors may use CSC 250 in lieu of CSC 230.*)*
This course covers all aspects of 3D game development using popular game development platform Unity. The topics include modeling, C# scripting, light, camera, collisions/ physics, audio, character animation, GUI, Terrain, shadows, level generation, and deployment in Windows, Linux, Android, and Virtual Reality (VR) systems (e.g., Oculus, HTC Vive, etc.). The gaming and VR industry is expanding rapidly. Knowledge of game development can open doors for job opportunities in gaming industries as well as many research opportunities. As part of the Collaborating Across Boundaries initiative at TCNJ, students in CSC 470 will work closely with peers from COM 487 - Student-Faculty Advanced Research course, taught by Dr. Hu where she will focus on using VR for social, cultural, and health issues. Therefore, upon completion of CSC 470, students will acquire a deeper understanding of different social, cultural, and health issues and make VR games to address those.

Couldn't get into the CS courses you wanted?
Complete the CS Department's Qualtrics Form in order to get on the wait-list (*after your registration window has opened*):

https://bit.ly/2P8h07J

Computer Science Department

Registration Newsletter for Fall 2020

Need help choosing your courses for the next few semesters?

Visit the department's advising webpage for more information on course planning, the suggested sequence, and requirements for internships and mentored research projects.

Reminder: all rising CS sophomores *must* take CSC 199 in Fall 2020.

Advising Notes:

Completed Mentored Research forms for CSC 298, 498, and 499 must be submitted to the CS office (cs@tcnj.edu) by the end of the registration window, 4:30 P.M. on April 17, 2020.

Please contact the CS office, Dr. Salgian, or your advisor if you have any questions.

STEM Building 200
Email: cs@tcnj.edu

Fall 2020 Computer Science Courses
(Please note: tentative courses may not run)

Course	Days	Time	Instructor
102-01	T/F	3:30 – 4:50 PM	Prof. DeGood
199-01	W	9:30 – 10:50 AM	Dr. Yoon
199-02	W	9:30 – 10:50 AM	Dr. Ferdous
199-03 (tentative)	W	9:30 – 10:50 AM	Staff
220-01	M/TH M	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Salgian
220-02	T/F F	11:00 – 12:20 PM 2:00 – 3:20 PM	Dr. Bloodgood
220-03	M/TH M	11:00 AM – 12:20 PM 12:30 – 1:50 PM	Dr. Yoon
220-04	M/TH M	2:00 – 3:20 PM 3:30 – 4:50 PM	Staff
220-05	T/TH	5:30 – 7:30 PM	Staff
220-06 (tentative)	M/W	5:30 – 7:30 PM	Staff
230-01	T/F F	11:00 AM – 12:20 PM 2:00 – 3:20 PM	Prof. DeGood
230-02	T/F T	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Li
270-01	T/F T	3:30 – 4:50 PM 2:00 – 3:20 PM	Dr. Bloodgood
275-01	M	5:30 – 6:50 PM	Prof. Devlin

(CS majors can take this course, but only as a free elective)

Course	Days	Time	Instructor
325-01	M/TH TH	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Knox
325-02	M/TH TH	2:00 – 3:20 PM 3:30 – 4:50 PM	Dr. Knox
335-01	T/F	2:00 – 3:20 PM	Dr. Papamichail
335-02	M/TH	12:30 – 1:50 PM	Staff
345-01	M/TH TH	2:00 – 3:20 PM 3:30 – 4:50PM	Dr. Yoon
355-01	M/TH	2:00 – 3:20 PM	Dr. Salgian
360-01	T/F	2:00 – 3:20 PM	Dr. Li
360-02 (tentative)	T/F	9:30 – 10:50 AM	Dr. Li
415-01	M/TH M	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Pulimood
415-02	M/TH TH	12:30 – 1:50 PM 11:00 AM – 12:20 PM	Dr. Pulimood
435-01	T/F	9:30 – 10:50 AM	Prof. DeGood
448-01	T/F	3:30 – 4:50 PM	Dr. Papamichail
470-01	T/F	11:00 AM – 12:20 PM	Dr. Ferdous