

Computer Science Department

Registration Newsletter for Spring 2022

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

Advising Window: October 18 – November 1

Note: some faculty advisors may offer advising appointments before the advising window opens, so check your email.

Registration Window: November 2 – 12

Check PAWS to find your academic advisor and Spring 2022 registration window.

Please watch for an email from your academic advisor with instructions for making advising appointments.

All Computer Science majors must meet with their academic advisors before registering for classes.

A registration hold has been placed on your PAWS account and will be removed **only** after the advising meeting.

You will not be able to register for Spring 2022 courses until you have met with your academic advisor and have had your advising hold removed after the meeting.

Spring 2022 Options Courses

CSC 275-01: Mini Course (0.5 units) in Computer Science: Test Development for Computer Scientists, 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 the theory and application of automated tests written by modern software developers from startups to enterprise. Students will gain hands-on experience in designing, writing and executing automated tests to help secure, harden and stabilize their applications.

CSC 315-01: Database Systems, M/TH, 2:00 – 3:20 PM, Prof. DeGood

CSC 315-02: Database Systems, M/TH, 4:00 – 5:20 PM, Prof. DeGood

(Prerequisites: CSC 230, CSC 270 and MAT 127 each with grades of C or higher. Non-majors may use CSC 250 in lieu of CSC 230. Mathematics majors may use MAT 200 and CSC 271 each with grade of C or higher in lieu of CSC 270.)

This course introduces students to the fundamental concepts necessary for designing, using, and implementing database systems. It stresses the fundamentals of database modeling and design, the language and facilities provided by database management systems, and system implementation techniques. A database management system like Oracle or PostgreSQL is utilized to underscore concepts learned in class.

CSC 450-01: Computer and Network Security, T/F, 11:00 AM – 12:20 PM, Dr. Li

(Prerequisite: CSC 360 or permission of instructor)

This course examines current concepts and practical techniques in computer and network security. In addition to participating in a broad discussion of system security, students gain hands on experience in diagnostic and development techniques. This course leads students to analyze system security areas, such as computer architecture and organization, operating systems, networking, and software design to the security projects developed in this course. This course provides a foundation for future creative endeavors in the field.

CSC 470-01: Special Topics: Natural Language Processing, T/F, 3:30 – 4:50 PM, Dr. Bloodgood

(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. Mathematics majors may use MAT 200 and CSC 271 each with a grade of C or higher in lieu of CSC 270.)

This course provides an introduction to NLP (Natural Language Processing). The major aspects of automated language processing will be covered, including foundational methods for computational processing of words, syntax, and semantics. In addition, students will be introduced to major applications of NLP technologies, including information extraction, question answering, and machine translation.

CSC 471-01: Genomics & Bioinformatics, M/TH, 9:30 – 10:50 AM & M, 11:00 AM – 1:50 PM, Dr. Nayak

(Prerequisites: BIO 201, 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. Mathematics majors may use MAT 200 and CSC 271 each with a grade of C or higher in lieu of CSC 270.)

This course will cover theoretical and practical components of genomics and bioinformatics. The major topics will include mapping and sequencing genomes, sequence alignment of nucleic acids and proteins, haplotype maps, analysis of complex traits, parallel profiling of gene expression, proteomics, phylogenetic analysis, and data mining. The laboratory will begin with the in silico analysis of gene families, continue to the formulation of a testable hypothesis about gene function, writing a mini-grant for peer review, testing of the hypothesis in a model organism, and conclude with a formal presentation of the data generated during the semester. This course is best suited for undergraduates who wish to continue with a career in basic science or biomedical research.

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/3uMyGJx>

Computer Science Department Advising Notes

Spring 2022 Computer Science Courses

220-01	M/W	5:30 – 7:30 PM	Dr. Russo
220-02	T/TH	5:30 – 7:30 PM	Prof. Niroomand
220-03	T/TH	5:30 – 7:30 PM	Prof. Higgins
230-01	T/F T	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Ferdous
230-02	T/F F	2:00 – 3:20 PM 11:00 AM – 12:20 PM	Dr. Ferdous
230-03	T/F F	3:30 – 4:50 PM 2:00 – 3:20 PM	Dr. Li
270-01	M/TH M	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Salgian
270-02	M/TH M	12:30 – 1:50 PM 2:00 – 3:20 PM	Dr. Salgian
270-03	T/F T	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Turka
270-04	T/F F	2:00 – 3:30 PM 11:00 AM – 12:20 PM	Dr. Turka
275-01	M	5:30 – 6:50 PM	Prof. Devlin
299-01	M	11:00 AM – 12:20 PM	Dr. Knox
299-02	M	2:00 – 3:20 PM	Dr. Knox
299-03	TH	2:00 – 3:20 PM	Dr. Knox
315-01	M/TH	2:00 – 3:20 PM	Prof. DeGood
315-02	M/TH	4:00 – 5:20 PM	Prof. DeGood
325-01	M/TH TH	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Knox
335-01	T/F	3:30 – 4:50 PM	Dr. Papamichail
345-01	M/TH TH	9:30 – 10:50 AM 11:00 – 12:20 PM	Dr. Yoon
345-02	M/TH TH	2:00 – 3:20 PM 3:30 – 4:50 PM	Dr. Yoon
415-01	M/TH TH	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Pulimood & Dr. Das
415-02	M/TH M	12:30 – 1:50 PM 11:00 AM – 12:20 PM	Dr. Pulimood & Dr. Das
450-01	T/F	11:00 AM – 12:20 PM	Dr. Li
445-01	T/F	2:00 – 3:20 PM	Dr. Papamichail
470-01	T/F	3:30 – 4:50 PM	Dr. Bloodgood
471-01	M/TH M	9:30 – 10:50 AM 11:00 AM – 1:50 PM	Dr. Nayak

Advising Resources

Visit the [CS Department's advising webpage](#) for more information on course planning, the suggested sequence, and requirements for internships and mentored research projects.

Reminder: all CS juniors *must* take CSC 299 in Spring 2022.

PAWS Holds

During advising, review your PAWS account for any financial, health or housing requirement, or other holds you may have. Until these holds are removed, you will not be able to enroll during registration. The CS Department **cannot** remove these holds and you will need to follow instructions to meet the requirements by clicking the Ø “hold” icon on PAWS and contacting the appropriate office.

Research Forms

Fully completed and signed mentored research forms for CSC 298, 498, and 499 must be submitted to cs@tcnj.edu by the end of the registration window, 4:30 P.M. on November 12, 2021.

Registration Questions?

Please contact the CS Office (cs@tcnj.edu), Dr. Salgian (salgian@tcnj.edu), or your CS advisor.