# Computer Science Department Registration Newsletter for Fall 2023

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

Advising Window: March 20 – April 3 Registration Window: April 4 – 14

Check PAWS to find your academic advisor and Fall 2023 registration window. Please watch for an email from your academic advisor with instructions for making advising appointments.

All 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 <u>only</u> after the advising meeting. You will not be able to register for Fall 2023 courses until you have met with your academic advisor and have had your advising hold removed after the meeting.

## Fall 2023 Advanced Core Option

#### CSC 360-01: Computer Networking, M/TH, 2:00 – 3:20 PM, Dr. Li

#### CSC 360-02: Computer Networking, M/TH, 3:30 – 4:50 PM, Dr. Li

(Prerequisites: CSC 230, CSC 270, and MAT 127, each with a grade of C or higher.

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

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.

## Fall 2023 Options Courses

#### CSC 320-01: Information Retrieval, M/TH, 12:30 – 1:50 PM, Dr. Yoon

(Prerequisites: CSC 230, CSC 270, and MAT 127, each with a grade of C or higher. IMM Majors: IMM core with a grade of C or higher.)

The course discusses theory and practice of searching and retrieval of information. Topics covered include automated indexing, statistical and linguistic models, text classification, Boolean and probabilistic approaches to indexing, query formulation and output ranking, information routing and filtering, topic detection and tracking, as well as measures of retrieval effectiveness, including relevance, utility, miss/false-alarm. Techniques for enhancing retrieval effectiveness including relevance feedback, query reformulation, thesauri, concept extraction, and automated summarization. Experimental retrieval approaches from relevant state-of-the-art conferences (TREC) as well as modern Internet search engines are discussed in detail.

#### CSC 350-01: Computer Graphics, M/TH, 2:00 – 3:20 PM, Dr. Salgian

(Prerequisites: CSC 230, CSC 270, and MAT 127, each with grades of C or higher, and MAT 205.)

An introduction to the fundamentals underlying the design of computer graphics software. Takes an algorithmic approach to the study of graphic operations required to create a complex scene. The modeling and transformation process is stressed. Topics include 2D and 3D graphic elements and transformations, viewing and clipping, hierarchical modeling, 3D concepts and objects, solid geometry, 3D transformations and the viewing pipeline, visible surface detection, and lighting models.

#### CSC 470-01: Special Topics, Computer Science III, T/F, 9:30 – 10:50 AM, Prof. DeGood

#### (Prerequisites: CSC 230, CSC 270 and MAT 127, each with a grade of C or higher.)

This course expands on the principles and techniques of software development covered in CS I and CS II: how to write software that is reliable, secure, modular, and reusable. Topics include abstraction, secure programming, the software development lifecycle, version control, scripting, and parallel processing.

\*\* This course is not recommended for students who have already taken CSC 415. \*\*

#### 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/3mFfGwl

# **Advising Resources**

Visit the <u>CS Department's</u> <u>advising webpage</u> for more information on course planning, the suggested sequence, and requirements for internships and mentored research projects.

Reminder: all rising CS sophomores <u>must</u> take CSC 199 in Fall 2023.

## **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 <u>cannot</u> 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**

Completed mentored research forms must be submitted via the <u>Qualtrics form</u> by the end of the registration window, 4:30 P.M. on April 14, 2023.

# **Registration Questions?**

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

102-01	T/F	3·30 - 1·50 PM	Dr. Russo
102-01	1/1	5.50 - 4.50 FIVI	DI. Russo
199-01	Μ	11:00 AM – 12:20 PM	Dr. Knox
199-02	Μ	2:00 – 3:20 PM	Dr. Knox
199-03	TH	2:00 – 3:20 PM	Dr. Knox
217-01	M/TH	3:30 – 4:50 PM	Dr. Turka
217-02	T/F	9:30 – 10:50 AM	Prof. DeGood
217-03	T/F	3:30 – 4:50 PM	Prof. DeGood
220-04	T/F T	2:00 – 3:20 PM 3:30 – 4:50 PM	Dr. Das
220-05	M/TH M	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Turka
230-01	M/TH TH	11:00 AM – 12:20 PM 12:30 – 1:50 PM	Dr. Ferdous
230-02	M/TH M	2:00 – 3:20 PM 12:30 – 1:50 PM	Dr. Ferdous
270-01	M/TH M	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Salgian
270-02	T/F T	3:30 – 4:50 PM 2:00 – 3:20 PM	Dr. Bloodgood
320-01	M/TH	12:30 – 1:50 PM	Dr. Yoon
325-01	M/TH TH	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Knox
335-01	T/F	9:30 – 10:50 AM	Dr. Papamichail
335-02	T/F	3:30 – 4:50 PM	Dr. Papamichail
345-01	M/TH TH	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Yoon
350-01	M/TH	2:00 – 3:20 PM	Dr. Salgian
360-01	M/TH	2:00 – 3:20 PM	Dr. Li
360-02	M/TH	3:30 – 4:50 PM	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	Dr. Das
470-01	T/F	2:00 – 3:20 PM	Prof. DeGood

Fall 2023 Computer Science Courses