## Computer Science Department

## Registration Newsletter for Spring 2024

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

Advising Window: October 16 – November 6 Registration Window: November 7 – 17

Check PAWS to find your academic advisor and Spring 2024 registration window. Your academic advisor will email you 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 2024 courses until you have met with your academic advisor and have had your advising hold removed after the meeting.

\*\*\* If you fail to enroll in classes by Friday, December 8, a late registration fee will be assessed by TCNJ, so you must plan to meet with your advisor and address all holds EARLY \*\*\*

#### **Spring 2024 Elective**

#### CSC 275-01: Intro to Data Science, T, 5:30 – 6:50 PM, Dr. Russo 0.5 units, free elective only!

The acceleration of data collection in all areas of the public and private sectors has resulted in a high demand for those with the skills required to extract insight from data and to help guide organizational strategy. In this course we will study and apply the Python Data Science toolkit to real world data sets. This course introduces the Python programming language and then covers important topics such as data wrangling, data storage, data visualization, and basic machine learning, including linear modeling, clustering, and dimensionality reduction. This course is suitable for students with basic programming experience and program control flow.

### **Spring 2024 Advanced Core Option**

### CSC 315-01 and 02: Database Systems, T/F, 11:00 AM – 12:20 PM (section 01) and T/F, 2:00 – 3:20PM (section 02), Prof. DeGood

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

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.

### **Spring 2024 Options Courses**

#### CSC 307 (STA 307): Data Mining and Predictive Modeling: T/F, 11:00 AM - 12:20 PM, Dr. Nardini

(Prerequisites: CSC 230, CSC 270, and MAT 127, each with a grade of C or higher, and STA 215.)

An introduction to Data Mining and Predictive Modeling. Topics include unsupervised and supervised learning, advanced methods for data visualization, and matrix factorization methods. A statistical programming software package will be used throughout the course (R or Python).

#### CSC 426-01: Machine Learning, 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.)

This course provides an introduction to machine learning. Machine learning is when computers learn from patterns in previously observed data how to make useful predictions about new data. The course will cover mathematical and computational foundations of machine learning algorithms. Supervised machine learning algorithms such as neural networks will be covered, as well as applications.

#### CSC 450-01: Computer and Network Security, M/TH, 3:30 – 4:50 PM, Dr. Li

(Prerequisites: CSC 360 or permission of the 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, Information Systems Security, 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 will provide an overview of security challenges and countermeasure strategies in the information systems environment, with a focus on confidentiality, integrity, and availability aspects of information systems. Students will work with actual application stacks and apply the concepts covered throughout the course to real-world scenarios. Course topics will include most of the objectives of the CompTIA Security+certification exam, an industry standard for validating baseline skills needed to perform core security functions and pursue an IT security career.

#### 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://tinyurl.com/ms9kcvtn

# Computer Science Department **Advising Notes**

### **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.

take CSC 299 in Spring 2024.

Reminder: All CS juniors must

**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

Research Forms Completed mentored research forms must be submitted via the Qualtrics form by the end of the registration window, 4:30 P.M.

contacting the appropriate office.

on November 17, 2023. **Registration Questions?** Please contact the CS Office (cs@tcnj.edu), Dr. Salgian (salgian@tcnj.edu), or your CS academic advisor (check PAWS).

## **Spring 2024 Computer Science Courses**

199-01	Т	11:00 AM – 12:20 PM	Dr. Das
217-01	T/F	3:30 – 4:50 PM	Prof. DeGood
217-02	T/F	11:00 AM – 12:20 PM	Dr. Russo
220-01	M/TH	9:30 – 10:50 AM	Dr. Datta

3:30 - 4:50 PM

2:00 - 3:20 PM

12:30 - 1:50 PM

12:30 - 1:50 PM

3:30 - 4:50 PM

2:00 - 3:20 PM

5:30 - 7:30 PM

5:30 - 7:30 PM

9:30 - 10:50 AM

9:30 - 10:50 AM

2:00 - 3:20 PM

3:30 - 4:50 PM

2:00 - 3:20 PM

5:30 - 6:50 PM

2:00 - 3:20 PM

2:00 - 3:20 PM

2:00 - 3:20 PM

9:30 - 10:50 AM

3:30 - 4:50 PM

9:30 - 10:50 AM

11:00 AM - 12:20 PM

M 11:00 AM - 12:20 PM T/F 2:00 - 3:20 PM

220-02

220-03 M/TH TΗ 230-01 M/TH

230-02 M/TH TΗ

230-03 M/W 230-04 T/TH

270-01 M/TH M 270-02 T/F

Τ 270-03 T/F

270-04 M/TH Μ 275-01 Т

299-01 M 299-02 Μ 299-03 TH T/F

307-01 315-01 M/TH 315-02 M/TH

M/TH 325-01 TΗ 335-01 T/F 345-01

M/TH M 345-02 M/TH TΗ

415-01 M 415-02

450-01

470-01

M/TH M/TH TΗ 426-01 T/F 445-01 T/F

M/TH

T/F

2:00 - 3:20 PM 12:30 - 1:50 PM 9:30 - 10:50 AM 11:00 AM - 12:20 PM 12:30 - 1:50 PM 11:00 AM - 12:20 PM

3:30 - 4:50 PM

9:30 - 10:50 AM

3:30 - 4:50 PM 2:00 - 3:20 PM

Dr. Knox Dr. Papamichail Dr. Yoon Dr. Yoon

Dr. Russo

Dr. Das

Dr. Ferdous

Dr. Ferdous

Dr. Li

Dr. Li

Dr. Salgian

Dr. Turka

Dr. Turka

Dr. Turka

Dr. Russo

Dr. Knox

Dr. Knox

Dr. Knox

Dr. Nardini

Prof. DeGood

Prof. DeGood

Dr. Pulimood Dr. Pulimood

Dr. Bloodgood Dr. Papamichail Dr. Li

Prof. DeGood