# Computer Science Department

## Registration Newsletter for Spring 2019

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

Advising Window: October 22 - November 5

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

**Registration Window:** November 6 - 16

Computer Science majors <u>must</u> meet with their academic advisors before registering for classes.

<u>A registration hold has been automatically placed on your account and will be removed after the advising meeting</u>. Please watch for an email from your advisor asking you to make an advising appointment. Check PAWS after October 17 to find your advisor, registration date, and appointment time.

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

### **Spring 2019 Options Courses**

CSC 275-01: Mini Course (0.5 units) in Computer Science: Introduction to Data Science, M, 5:30 – 6:50 PM, Dr. Ammar (Prerequisites: CSC 215, 220, or 250) This course does not count for Computer Science credit and can only be taken as a free elective. With the torrent of large datasets flowing in the public and private domains, the need to understand trends and make informed decisions has yielded the discipline commonly referred to as Data Science. The objective of Data Science is to transform, visualize and interpret large collections of information to generate knowledge and drive decisions and strategy. In this course we will learn how to go from retrieving data to developing an interactive web-based app to showcase trends and extract knowledge.

#### CSC 315-01: Database Systems, T/F, 2:00 - 3:20 PM, Dr. Butler

(Prerequisites: CSC 230, 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.

#### CSC 470-01: Machine Learning, M/TH, 3:30 – 4:50 PM, Dr. Bloodgood

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

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

#### CSC 470-02: 3D Game Development, M/TH, 2:00 – 3:20 PM, Dr. Ferdous

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

This course covers all aspects of 3D game development using the popular game development platform Unity. 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 systems (e.g., Oculus, HTC Vive, Google Daydream, etc.).

#### CSC 470-03: Advanced Browser Technologies, W, 5:30 - 8:20 PM, Dr. Russo

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

Web browsers have evolved from simple hyperlinked document rendering engines to full-featured application development platforms. This hands-on course will review core topics in computer science and how each is represented in a modern web browser. Topic areas include, but are not limited to: ECMAScript, Canvas API, Asynchronous Execution, Websockets, Modules, Document Object Model, Web Workers, Web Storage API, Scalable Vector Graphics, and Prototype Inheritance.

#### Couldn't get into the 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://goo.gl/WhEu18

# Computer Science Department

Registration Newsletter for Spring 2019

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 CS juniors

must take
CSC 299 in
Spring 2019

### **Advising Notes:**

CS Majors <u>must</u> take CSC 270-01 or 270-02. CSC 270-03 is reserved for Engineering majors.

MAT 128-H1 is reserved for Honors students.

STA 215-01 & 215-06 are reserved for Biology majors.

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

**STEM Building 200** 

**Phone:** (609) 771-2268 **Email:** cs@tcnj.edu

## **Spring 2019 Computer Science Courses**

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220-01	M/TH M	12:30 – 1:50 PM 11:00 AM – 12:20 PM	Dr. Ferdous
220-02	T/F T	11:00 AM - 12:20 PM 2:00 - 3:20 PM	Mr. DeGood
220-03	T/TH	5:30 – 7:30 PM	Staff
230-01	T/F F	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Li
230-02	T/F T	2:00 – 3:20 PM 11:00 AM – 12:30 PM	Dr. Li
230-03	M/TH TH	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Anand
270-01	M/TH M	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Salgian
270-02	M/TH M	2:00 – 3:20 PM 12:30 – 1:50 PM	Dr. Salgian
270-03	T/F T	3:30 – 4:50 PM 5:00 – 6:20 PM	Dr. Butler
270-04	T/F T	8:00 – 9:20 AM 9:30 – 10:50 AM	Dr. Muthuswamy
<b>275-01</b> (CS majors car	M n take this course	5:30 – 6:50 PM , but only as a free elective)	Dr. Ammar
299-01	M	11:00 AM – 12:20 PM	Dr. Knox
299-02	М	2:00 – 3:20 PM	Dr. Knox
299-03	М	3:30 – 4:50 PM	Dr. Knox
315-01	T/F	2:00 – 3:20 PM	Dr. Butler
325-01	M/TH TH	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Knox
335-01	T/F	2:00 – 3:20 PM	Dr. Papamichail
345-01	M/TH TH	9:30 – 10:50 AM 11:00 AM – 12:20 PM	Dr. Yoon
345-02	M/TH TH	12:30 – 1:50 PM 3:30 – 4:50 PM	Dr. Yoon
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
445-01	T/F	3:30 – 4:50 PM	Dr. Papamichail
470-01	M/TH	3:30 – 4:50 PM	Dr. Bloodgood
470-02	M/TH	2:00 – 3:20 PM	Dr. Ferdous
470-03	W	5:30 – 8:20 PM	Dr. Russo