Department of Computer & Electrical Engineering and Computer Science
Florida Atlantic University
Course Syllabus

1. Course title/number, number of credit hours	
CEN 4400 Introduction to Computer Systems Performance Evaluation	3 credit hours
2. Course prerequisites, corequisites, and where the course fits in the program of study	
Prerequisites: COP 3014 and (STA4821 or STA2023 or equivalent)	
3. Course logistics	
Term: Fall 2020 *Class location and time:* TBA	
4. Instructor contact information	
Instructor's name *Office address* *Office Hours* *Contact telephone number* *Email address*	Dr.Taghi M Khoshgoftaar., Professor Engineering East Bldg., Room 511 TBA 561-297-3994 khoshgof@fau.edu
5. TA contact information	
TA's name *Office address* *Office Hours* *Contact telephone number* *Email address*	TBA
6. Course description	
Principles of the quantitative evaluation techniques for computer system hardware and software, emphasizing the establishment and analysis of performance criteria. Deterministic and stochastic methods will be discussed.	
7. Course objectives/student learning outcomes/program outcomes	
Course objectives	To enable students to understand basic concept of performance modeling.
Student learning outcomes & relationship to ABET 1-7 outcomes	BSCS program outcomes Proficiency in the area of computer systems performance analysis and Evaluation.
8. Course evaluation method	
Assignments worth 50% total and two exams worth 50% total.	
9. Course grading scale	
Grading Scale: 92 and above: "A", above 88 and below 92: "A-", above 85 but below 89: "B+", 82-85: "B", 79-81: "B-", above 75 but below 79: "C+", 73-75: "C", 70-72: "C-", above 65 but below 70: "D+", 60-65: "D", above 55 but below 60: D-, 55 and below: "F."	

10. Policy on makeup tests, late work, and incompletes

Assignments are to be submitted on time, with possible point penalties for late submissions. In no case will an assignment be accepted after the graded papers for that assignment have been returned to the students. However, appropriate accommodations will be made for students having a valid medical excuse for being unable to work on an assignment during its two week period.

Unless there is solid evidence of medical or otherwise serious emergency situation incomplete grades will not be given.

11. Special course requirements

NA

12. Classroom etiquette policy

University policy requires that in order to enhance and maintain a productive atmosphere for education, personal communication devices, such as cellular phones, are to be disabled in class sessions, and laptops are only to be used for note taking and related activities.

13. Attendance policy statement

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance.
Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

14. Disability policy statement

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

15. Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

16. Code of Academic Integrity policy statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001. If your college has particular policies relating to cheating and plagiarism, state so here or provide a link to the full policy—but be sure the college policy does not conflict with the University Regulation.

17. Required texts/reading

To reduce costs for our students, we strongly encourage you to explore the adoption of open educational resources (OER), textbooks and other materials that are freely accessible. We also encourage you to clearly state in the syllabus if course materials are available on reserve in the Library.

(1) The Art of Computer Systems Performance Analysis, by Raj Jain.
(2) Selected articles and papers are posted on the course we site.

18. Supplementary/recommended readings

NA

19. Course topical outline, including dates for exams/quizzes, papers, completion of reading

Topics:

1. Introduction - the art of performance evaluation
2. Measurement techniques and tools
3. Summarizing measured data
4. Comparing systems using sample data
5. Simple linear regression models
6. Other regression models
7. Introduction to experimental design
8. One-factor experiments
9. Two-factor full factorial design
10. Case studies