

CPCS-465 Syllabus

Catalog Description

CPCS-465 Performance and Modeling of Computing Systems

Credit: 3 (Theory: 3, Lab: 0, Practical: 0)

Prerequisite: CPCS-324 , CPCS-361

Classification: Elective

This objective of this course is to familiarize students with the fundamentals of performance and computer systems modeling, introducing students to computer systems and their components (hardware and software). This course also covers different methods of performance measurement, algorithms of software performance measurement, and computer performance measurement.

Class Schedule

Lab/Tutorial 90 minutes 1 times/week

Meet 50 minutes 3 times/week or 80 minutes 2 times/week

Textbook

Neil J. Gunther, , "Analyzing Computer System Performance with Perl::PDQ", Springer; 2 edition (2011-07-30)

ISBN-13 9783642225826 **ISBN-10** 3642225829

Grade Distribution

| Week | Assessment | Grade % |
|------|------------|---------|
|------|------------|---------|

Topics Coverage Durations

| Topics | Weeks |
|---|-------|
| Introduction to computer systems and system components: hardware and software | 3 |
| Methods of performance measurement | 3 |
| Algorithms of software performance measurement | 3 |
| Computer performance measurement | 2 |
| Computer and software modeling | 3 |

Last Articulated

Relationship to Student Outcomes

| a | b | c | d | e | f | g | h | i | j | k |
|---|---|---|---|---|---|---|---|---|---|---|
| x | x | x | | | | | | | | |

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. To understand the various architectures of computer systems. ()
2. To be familiar with the software performance measurement methods. ()
3. To be familiar with the hardware performance measurement methods. ()
4. To be familiar with the simulation and modeling methods. ()

Coordinator(s)