CPIT-201 Syllabus

Catalog Description

CPIT-201 Introduction to Computing
Credit: 3 (Theory: 3, Lab: 0, Practical: 1)
Prerequisite: None
Classification: College Required

The objective of this course is present computer science subject areas and applications in ways that serve to motivate the study of computer science and to put into context the various subjects that a student encounter later in their studies. Topics include an introduction to the discipline of computing, computer systems, number systems, data representation, basic computer organization, operating system functionality, basics of networking, the Internet, an overview of database systems, models, software engineering methodologies, and programming languages.

Class Schedule

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

Lab/Tutorial 90 minutes 1 times/week

Textbook

Gilberg, Richard F., Forouzan, Behrouz A., "Foundations of Computer Science, Second Edition", Course Technology; 2 edition

ISBN-13 9781418836092 **ISBN-10** 1418836095

Grade Distribution

Week	Assessment	Grade %
3	Quiz 1	2.5
6	Quiz 2	2.5
7	Exam 1	25
9	Quiz 3	2.5
11	Quiz 4	2.5
12	Exam 2	25
16	Comprehensive Final Exam	40

Last Articulated

December 18, 2017

Relationship to Student Outcomes

a	b	c	d	e	f	g	h	i	j	k	l	m	n
x	x			x				x	x				

Course Learning Outcomes (CLO)

By completion of the course the students should be able to

1. Describe the historical development of computer science and technologies and their applications (b)
2. **Define the concept of the number systems (a)**
3. Compute and convert between different numbering Systems (a)
4. **Discover how the computer represent, manipulate different data types (i)**
5. **Describe the basic structures and functional components of computer hardware and how the computer communicates with peripherals (b)**
6. **Describe the basic operating systems functions and how the functions are done (i)**
7. Compare different operating systems (b)
8. Discover the computer network criteria, physical structure and network categories (b)
9. Describe constructions and operation of computer networks, applications of networks, Internet and security (i)
10. **Solve problems using the concept of algorithm and the different approaches of writing algorithm (j)**
11. Identify the basics of software engineering discipline and software life cycle (j)
12. Distinguish different software engineering methodologies (b)
13. Develop theoretical understanding of the computer basics and day to day life issues such as security, privacy, liability and social awareness (e)

Coordinator(s)

Dr. Rayed Alghamdi, Associate Professor

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Topics Coverage Durations

Topics	Weeks
Introduction	1
Number Systems	2
Data Storage	2
Operations on Data	1
Computer Organization	2
Computer Networks	2
Operating Systems	2
Algorithms	2
Software Engineering	1