

University / Academy: Menoufia University

College / Institute: Faculty of Electronic Engineering

Department: Computer Science and Engineering

## Course Specification

1- Course basic information:		
<b>Course Code: CSE 468</b>	<b>Course Title:</b> Distributed Systems and Internet Technology	<b>Academic year: 2011/2012</b> <b>Level ( 4 ) – Semester : 2</b>
<b>Faculty requirement</b>	<b>Teaching hours: Lecture</b> <input type="text" value="3"/> <b>Tutorial</b> <input type="text" value="1"/> <b>Lab</b> <input type="text" value="1"/>	

<b>2- Aim of the course</b>	<ul style="list-style-type: none"><li>_ To introduce the students to the fundamentals of Distributed Computer System.</li><li>_ To learn the basic unit of the system in more detail.</li><li>_ To learn the principles concepts of Distributed Computer System.</li><li>_ To develop the student's skills in designing Distributed Computer System.</li></ul>
3- Intended Learning Outcomes:	
<b>A- Knowledge and Understanding:</b>	a1. Concepts and theories of mathematics and sciences, appropriate to the computer science. a8. Current engineering technologies as related to computer science and engineering. a18. Modern trends in information technology and its fundamental role in business enterprises.
<b>B- Intellectual Skills</b>	b2. Select appropriate solutions for engineering problems based on analytical thinking. b3. Think in a creative and innovative way in problem solving and design.

	<p>b4. Combine, exchange, and assess different ideas, views, and knowledge from a range of sources.</p> <p>b5. Assess and evaluate the characteristics and performance of components, systems and processes.</p> <p>b9. Judge engineering decisions considering balanced costs, benefits, safety, quality, reliability, and environmental impact.</p> <p>b11. Analyze results of numerical models and assess their limitations.</p> <p>b16. Proposing various computer-based solutions to business system problems.</p>
<b>C- Professional Skills</b>	<p>c1. Apply knowledge of mathematics, science, information technology, design, business context and engineering practice integrally to solve engineering problems.</p> <p>c2. Professionally merge the engineering knowledge, understanding, and feedback to improve design, products and/or services.</p> <p>c6. Use a wide range of analytical tools, techniques, equipment, and software packages pertaining to the discipline and develop required computer programs.</p> <p>c7. Apply numerical modeling methods to engineering problems.</p> <p>c11. Exchange knowledge and skills with engineering community and industry.</p> <p>c12. Prepare and present technical reports.</p> <p>c15. Write computer programs on professional levels achieving acceptable quality measures in software development.</p> <p>c16. Conducting user support activities competently.</p>
<b>D- General Skills</b>	<p>d1. Collaborate effectively within multidisciplinary team.</p> <p>d3. Communicate effectively.</p> <p>d4. Demonstrate efficient IT capabilities.</p> <p>d7. Search for information and engage in life-long self learning computer science and engineering.</p> <p>d8. Acquire entrepreneurial skills.</p> <p>d9. Refer to relevant literatures.</p>

<b>4- Course Contents</b>	<ul style="list-style-type: none"> <li>- Introduction for distributed system.</li> <li>- Distributed System Applications.</li> <li>-Interprocess Communication -An Overview .</li> <li>- Cloud Computing Fundamentals.</li> <li>- Open Source Cloud stack. Web Design Languages</li> </ul>
<b>5- Teaching and Learning Methods</b>	<ul style="list-style-type: none"> <li>- <b>Lectures</b></li> <li>- <b>Tutorials</b></li> <li>- <b>Labs and/or case studies</b></li> <li>- <b>Research assignments</b></li> </ul>
<b>6- Teaching and Learning Methods for disable students</b>	<b>NA</b>
<b>7- Student Assessment</b>	
<b>a- Assessment Methods</b>	<ul style="list-style-type: none"> <li>- <b>Weekly sheet exercises at class room</b></li> <li>- <b>Quizzes</b></li> <li>- <b>Labs and/or case study for more demonstration.</b></li> <li>- <b>Midterm, and final exams</b></li> </ul>
<b>b- Assessment Schedule</b>	<ul style="list-style-type: none"> <li>- Exercise sheet/ Lab assignment :      <b>Weekly</b></li> <li>- Quiz-1:    <b>Week <u>no</u> 5</b></li> <li>- Mid-Term exam:                                      <b>Week <u>no</u> 8</b></li> <li>- Quiz-2:    <b>Week <u>no</u> 11</b></li> <li>- Lab exam:    <b>Week <u>no</u> 14</b></li> <li>- Final – term examination:                      <b>Week <u>no</u> 15</b></li> </ul>
<b>c- Weighting of Assessment</b>	<ul style="list-style-type: none"> <li>- Class tutorial and quizzes :                      ...5... %</li> <li>- Mid-term examination:                              ...20... %</li> <li>- Case study and/or practical exam:              ...10... %</li> <li>- Final – term examination:                          ...60... %</li> <li>- Other types of assessment:                      ...5... %</li> </ul> <p style="text-align: right; margin-right: 20px;"><b>Total    100 %</b></p>
<b>8- List of text books and references:</b>	
<b>a- Course notes</b>	
<b>b- Text books</b>	Ghosh, S. (2007) Distributed Systems: An Algorithmic Approach. Chapman &

	Hall/CRC, Taylor & Francis Group, 6000 Broken Sound Parkway NW, Suite 300 Boca Raton, FL 33487-2742. ISBN-13: 978-1-58488-564-1
<b>c- Recommended books</b>	Bedrouni, A., Mittu R., Boukhtouta, A. and Berger J. ( 2009) Distributed Intelligent Systems: A Coordination Perspective. Springer Dordrecht Heidelberg London New York. ISBN 978-0-387-77701-6
<b>d- Periodicals, Web sites .....etc</b>	Then there are many smaller conferences and workshops, and expert system related research also gets presented at the main AI conferences also, Relevant journals. Generally useful sites for locating papers are DBLP and CiteSeer.

### Course Contents - ILOs Matrix

Content Topics	Week	A- Knowledge & Understanding	B- Intellectual skills	C- Professional and practical skills	D- General and transferable skills
Introduction for distributed system.	1,2	a1.	b3. b4.	c1. c6.	d1. d3. d4.
Distributed System Applications.	3,4	a1. a18.	b2. b3.	c2. c7.	d3. d4. d7.
Interprocess Communication -An Overview .	5,6,7	a18.	b3. b9.	c6.	d4. d7. d8.
Cloud Computing Fundamentals.	8,9,10	a8.	b11. b16.	c11. c15.	d7. d8. d9.
Open Source Cloud stack.	11,12, 13	a1. a8.	b3. b4. b5.	c12. c16.	d3. d4. d8. d9.

**Course coordinator:**

**Dr. Dr. Gamal M. Attiya**

**Date: / /**

**Head of Department:**

**Prof. Nawal Ahmed El-Fishawy**