



**University/Academy:** Arab Academy for Science and Technology & Maritime Transport

**Faculty/Institute:** College of Computing and Information Technology

**Program:** Information systems

**Form No. (12)  
Course Specification**

**1- Course Data**

<b>Course Code:</b> IS472	<b>Course Title:</b> E-learning	<b>Academic Year/Level:</b> Year 4 / Semester 7
<b>Specialization:</b> Information Systems	<b>No. of Instructional Units:</b> 2 hrs lecture 2 hrs section	<b>Lecture:</b>

<b>2- Course Aim</b>	This course involves a new approach, which must take into account pedagogical, technological and organizational features to form a well-designed education system. A practical focus is maintained throughout, with advice on implementation and case studies. The course will cover Information and communication technology skills particularly relevant to e-learning environments and approaches.
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**3- Intended Learning Outcome:**

<b>a- Knowledge and Understanding</b>	<p><b>Students will be able to demonstrate knowledge of:</b></p> <p>K14. The principles and techniques of database management systems, management, data mining, geographical information systems, multimedia, application development, business process management, enterprise systems, human-computer interaction, object-oriented analysis and design, e-technologies, multimedia, image processing, information and infrastructures security and computer graphics techniques.</p> <ul style="list-style-type: none"><li>▪ Understand concepts of e-learning.</li><li>▪ Understand how e-learning is different from traditional methods.</li><li>▪ Know what is meant by learning style.</li><li>▪ Define Interaction in learning environments.</li><li>▪ Define Learning resources.</li><li>▪ Understand how individual learning is different from group learning.</li><li>▪ Identify evaluation of e-learning system.</li><li>▪ Understand the concept of support in learning.</li><li>▪ Understand main traditional learning skills on which e-learning skills are built upon.</li><li>▪ Know information and communication technology skills and concepts particularly relevant to e-learning.</li><li>▪ Define different means of delivering e-learning.</li><li>▪ Understand e-learning environments and approaches.</li><li>▪ Understand the nature of e-learning skills.</li></ul>
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	<ul style="list-style-type: none"> <li>▪ Define the necessary e-learning skills required for e-learners.</li> <li>▪ Understand how learners can develop their e-learning skills.</li> <li>▪ Know the nature of communication skills that help learners take part in e-learning courses.</li> <li>▪ Understand the meaning of communication in learning environments.</li> <li>▪ Define some important communication skills in learning.</li> <li>▪ Understand the nature of working and learning with others in collaborative learning. <ul style="list-style-type: none"> <li>▪ Define shapes of group and cooperative learning.</li> </ul> </li> </ul>
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<b>b- Intellectual Skills</b>	<p><b><u>By the end of the course, the student acquires high skills and an ability to understand:</u></b></p> <p>I10. Define traditional and nontraditional information systems problems, set goals towards solving them, and. observe results</p> <p>I16. Solve software problems with pressing commercial, time, and industrial constraints.</p> <p>I17. Suggest an innovative design to solve a problem containing a range of commercial and industrial constraints.</p> <ul style="list-style-type: none"> <li>▪ Realize the benefits of e-learning approaches.</li> <li>▪ Learn about important leaning concepts like Interaction and support.</li> <li>▪ Recognize the new role of tutors in e-learning environments.</li> <li>▪ Differentiate between formal and informal learning.</li> <li>▪ Recognize the difficulties of achieving some learning skills in traditional learning.</li> <li>▪ Realize the need for e-learning to enhance some learning skills.</li> <li>▪ Articulate ICT implications for designing e-learning systems.</li> <li>▪ Demonstrate the choice of delivering e-learning techniques and the advantage and disadvantage associated with each.</li> <li>▪ Recall the most important e-learning skills</li> <li>▪ Learn the importance of having e-learning systems that facilitate e-learning skills.</li> <li>▪ Recognize the importance of communication skills in learning process.</li> <li>▪ Learn about some important communication skills for learning.</li> <li>▪ Recognize the importance of group and cooperative learning skills.</li> </ul> <p>Learn some ways for group and cooperative learning.</p>
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<b>c- Professional Skills</b>	<p><b><u>By the end of the course the student will have the ability to:</u></b></p> <p>P12. Plan and manage an information systems project from inception to final implementation and cut-over</p> <p>P15. Apply the principles of effective information acquisition, information management, organization, and information-retrieval to text, images, sound, and video.</p> <p>P19. Maintain existing information systems</p> <ul style="list-style-type: none"> <li>▪ Assessing traditional and e-learning skills</li> <li>▪ Apply e-learning concepts in tutorial activities.</li> <li>▪ Assessing traditional and e-learning skills.</li> <li>▪ Assessing different learning resources.</li> <li>▪ Evaluate e-learning courses.</li> <li>▪ Apply e-learning concepts in tutorial activities.</li> <li>▪ Evaluate traditional learning environments.</li> </ul>
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	<ul style="list-style-type: none"> <li>▪ Apply learned concepts related to traditional learning skills in tutorial activities.</li> <li>▪ Use different information and communication technologies in e-learning environments.</li> <li>▪ Apply learned concepts related to computer skills in tutorial activities.</li> <li>▪ Select suitable learning environment for particular cases.</li> <li>▪ Apply learned concepts related to learning environments in tutorial activities.</li> <li>▪ Select suitable learning environment for particular cases.</li> <li>▪ Apply learned concepts related to e-learning skills in tutorial activities.</li> <li>▪ Develop e-learning systems that provide different e-learning skills.</li> <li>▪ Practice to develop main e-learning skills.</li> <li>▪ Apply learned concepts related to communication skills in tutorial activities.</li> <li>▪ Develop e-learning systems that provide different communication means between learners and tutors.</li> <li>▪ Design e-learning systems that help learners develop their communication skills.</li> <li>▪ Apply learned concepts related to group learning in tutorial activities.</li> <li>▪ Develop e-learning systems that provide group learning facilities to learners and tutors. <ul style="list-style-type: none"> <li>▪ Design e-learning systems that help learners develop their group learning skills.</li> </ul> </li> </ul>																
<p><b>d- General Skills</b></p>	<p><b>Students will be able to:</b></p> <p>G1. Demonstrate the ability to make use of a range of learning resources and to manage one's own learning.</p> <p>G7. Show the use of general computing facilities.</p> <ul style="list-style-type: none"> <li>▪ Improve team work skills</li> <li>▪ Acquire better work ethics through valuing individual effort</li> <li>▪ Improve Learning skills <ul style="list-style-type: none"> <li>▪ Improve Communication and presentation skills</li> </ul> </li> </ul>																
<p><b>4- Course Content</b></p>	<table border="1" data-bbox="528 1480 1406 2074"> <thead> <tr> <th>#</th> <th>CLO</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Understand how e-learning is different from traditional methods.</td> </tr> <tr> <td>2</td> <td>Understand the main traditional learning skills on which e-learning skills are built upon.</td> </tr> <tr> <td>3</td> <td>Know information and communication technology skills particularly relevant to e-learning</td> </tr> <tr> <td>4</td> <td>Understand e-learning environments and approaches.</td> </tr> <tr> <td>5</td> <td>Understand the nature of e-learning skills</td> </tr> <tr> <td>6</td> <td>Practice to develop main e-learning skills.</td> </tr> <tr> <td>7</td> <td>Know the nature of communication technologies that help learners take part in e-learning courses.</td> </tr> </tbody> </table>	#	CLO	1	Understand how e-learning is different from traditional methods.	2	Understand the main traditional learning skills on which e-learning skills are built upon.	3	Know information and communication technology skills particularly relevant to e-learning	4	Understand e-learning environments and approaches.	5	Understand the nature of e-learning skills	6	Practice to develop main e-learning skills.	7	Know the nature of communication technologies that help learners take part in e-learning courses.
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	8	Understand the nature of working and learning with others in collaborative learning
<b>5- Teaching and Learning Methods</b>	Lectures, Projects, Individual study & self-learning.	
<b>6- Teaching and Learning Methods for Students with Special Needs</b>	<ul style="list-style-type: none"> <li>• Students with special needs are requested to contact the college representative for special needs ( currently Dr Hoda Mamdouh in room C504)</li> <li>• Consulting with lecturer during office hours.</li> <li>• Consulting with teaching assistant during office hours.</li> <li>• Private Sessions for redelivering the lecture contents.</li> </ul> For handicapped accessibility, please refer to program specification	
<b>7- Student Assessment:</b>		
<b>a- Procedures used:</b>	Exams and Individual Projects	
<b>b- Schedule:</b>	7 <sup>th</sup> week exam 30% Project 20% Final exam 40%	
<b>c- Weighing of Assessment:</b>	7 <sup>th</sup> week exam 30% Project 20% course work 10% Final exam 40%	
<b>8- List of References:</b>		
<b>a- Course Notes</b>	From the Moodle on www.aast.edu	
<b>b- Required Books (Textbooks)</b>	Learning By Design, John Wiley and Sons, 2011	
<b>c- Recommended Books</b>	Hedberg, B., <i>Virtual Organizations and Beyond: Discover Imaginary Systems</i> , John Wiley, 1997	
<b>d- Periodicals, Web Sites, ..., etc.</b>		

**Course Instructor:**

**Sign**

**Head of Department:**

**Sign**