



UNIVERSITI TEKNOLOGI MARA

EDU456: Innovative Technologies In Teaching and Learning

Course Name (English)	Innovative Technologies In Teaching and Learning APPROVED
Course Code	EDU456
MQF Credit	3
Course Description	This is an introduction to innovative technologies and its relations to instructional technology focusing on its definition, history, instructional design models, instructional theory, web tools, and technology integration. The course addresses current thinking on instructional technology and ways the internet is rapidly changing instruction at all levels in an organization. While technology is important, it should serve as an enabler and emphasis should be on the aspects of technology integration. It also examines the content, design and development of self-instructional materials for use at any organization.
Transferable Skills	Technology Literacy Computer Skills Teamwork
Teaching Methodologies	Lectures, Blended Learning, Lab Work
CLO	CLO1 Display the skills in using application programmes for teaching and administrative purposes (P2) CLO2 Produce instructional materials based on instructional design principles using innovative technology tools CLO3 Demonstrate autonomous learning through article selections and reflective entries relating to the latest development in innovative technologies (A3)
Pre-Requisite Courses	No course recommendations
Topics	
1. 1. Instructional technology 1.1) a.What are innovative technologies in teaching and learning? 1.2) b.How do innovative technologies relate to instructional technology?	
2. 2. Instructional Design 2.1) a.Soft and hard technology 2.2) b.Supporting Student Centered Learning through Project Based Learning (PBL)	
3. 3. Technology tools: Power Point for Effective Presentation/ Desktop Publishing/ Website Development 3.1) a.Introduction to presentation application 3.2) b.Create a Presentation with using Wizard 3.3) c.Quick Presentation on Wizard with a Blank Publication 3.4) d.Create Presentation Based on a Template 3.5) e.Planning for Content 3.6) f.E-content Development 3.7) g.Simple audio editing and insert in PowerPoint presentation 3.8) h.Picture editing using PowerPoint presentation 3.9) i.Video editing and insert in PowerPoint presentation 3.10) j.Introduction to desktop publishing 3.11) k.Creating a Publication/Web Site using free host provider	
4. 4. Technology Tools : Desktop Publishing/Web Site Development 4.1) a. Developing website 4.2) b. Creating Databases 4.3) c. Creating Documents	

<p>5. 5. Spreadsheet: Using Excel</p> <p>5.1) a.Introduction to spreadsheet application 5.2) b.Creating a New Workbook /Worksheet 5.3) c.Entering Data 5.4) d.Editing Data 5.5) e.Working with Worksheets 5.6) f.The Formulas 5.7) g.Integrating Basic Functions of Excel 5.8) h.Working with Charts 5.9) i.Create a Database and Data Analysis 5.10) j.Protecting Workbook / Worksheet 5.11) k.Integrating a Spreadsheet into projects</p>
<p>6. 6. The Internet and online instruction</p> <p>6.1) a.Internet in the organization 6.2) b.Online Learning 6.3) c.E-learning 6.4) d.M-learning 6.5) e.Ubiquitous learning 6.6) f.Explain the characteristics of a Learning Management System (LMS) 6.7) g.Compare several collaboration tools such as e-mail, discussion forums and others. 6.8) h.Discuss how social networking tools may be used in online-instruction.</p>
<p>7. 7. Web 2.0 tools for the Organizational tasks</p> <p>7.1) a.(Blog) / Weebly / Social Media Websites 7.2) b.Google (Google form, Google doc and etc) 7.3) c.Cloud storage</p>
<p>8. 8. Web 2.0 tools for presentation</p> <p>8.1) a.Infographic 8.2) b.Prezi 8.3) c.Emaze 8.4) d.Other tools</p>
<p>9. 9. Designing technology based instruction</p> <p>9.1) a. Basic principles for technology based instruction 9.2) b.Elements for self- instructional materials 9.3) c.Instructional Design Principles 9.4) d. Instructional theories and Instructional Design 9.5) e.Instructional Design Models 9.6) f.ADDIE, Gagne model</p>
<p>10. 10. The Flipped Instruction Approach</p> <p>10.1) a.Definition of flipped classroom 10.2) b.Implementation of flipped learning approach 10.3) c.Analyze the underlying theory of flipped approach 10.4) d.Developing flipped classroom materials</p>
<p>11. 11. Massive Open Online Course (MOOC)</p> <p>11.1) a. Definition of MOOC 11.2) b. MOOC as a platform of content delivery 11.3) c. Analyze the underlying theory of MOOC 11.4) d. Developing MOOC</p>
<p>12. 12. Managing technology integration in the organization</p> <p>12.1) a.Software and Hardware 12.2) b.Managing an IT in organization 12.3) c.Overcoming the problem 12.4) d.IT for Special Needs Students</p>
<p>13. 13. Issues Related to Technology in The organization</p> <p>13.1) a.Software piracy 13.2) b.Unequal distribution 13.3) c.Health risks 13.4) d.Copyright Issues in IT usage 13.5) e.Copyright Law in Malaysia 13.6) f.Cyber Law in Malaysia</p>
<p>14. 14. Emerging technologies and future Trends</p> <p>14.1) a.Organization of the Future 14.2) b.Current issues and topics</p>

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Electronic Portfolio (e-Portfolio)	20%	CLO3
	Assignment	Demonstrate Self Instructional Courseware via Technology and Innovation Exposition	20%	CLO2
	Assignment	Produce Self Instructional Courseware	40%	CLO2
	Test	Test	20%	CLO1

Reading List	Recommended Text	<ul style="list-style-type: none"> • Vermaat, Sebok, Freud, Campbell & Frydenberg 2018, <i>Discovering Computer 2018: Tools, Apps, Device & The Impact of Course Technology</i>, Cengage Learning UK • Johan @ Eddy Luanan 2015, <i>The Use of Instructional Technology in Classroom</i>, 2nd Ed.
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Article/Paper List	Recommended Article/Paper Resources	<ul style="list-style-type: none"> • 2018 Managing a successful IT Learning Session with ICT support, <i>International Journal on e-Learning and Higher Education</i>, 8, 1 [ISSN: 1985-8620] https://journalined.uitm.edu.my/
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Other References	<ul style="list-style-type: none"> • Website 2018 <i>Computer Application Manuals: Microsoft Office 2018</i>
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