International Telecommunication Union

Online self-paced Training Course on

How to Design and Develop Online Courses
15 March – 31 December 2021

TRAINING COURSE OUTLINE

COURSE DESCRIPTION

Title	How to Design and Develop Online Courses
Objectives	To develop an understanding of e-pedagogy and principles associated with design and development of online training courses by providing learning how to make these courses interactive and engaging to enhance retention and transfer of knowledge
Dates	Open throughout the year
Duration	Self-paced
Registration deadline	15 March 2021 to 24 December 2021
Training fees	Free
Course code	21OS26390MUL-E

DESCRIPTION OF THE TRAINING COURSE

The objective of this training course is to improve the participants' skills in the design and development of online courses. The course is made up of 5 modules. Participants will be invited to develop their own course by completing specific tasks and will have access to a range of open multimedia resources that will allow them to convert face-to-face course contents into online courses using a variety of media tools.

NB: Module 5 is about Moodle features and tools, in general, as well as about the ITU Academy Moodle platform. Although you may not be ITU staff or ITU tutors you are required to complete Module 5 in order to receive the badge.

The course is designed for people with little familiarity on the topic of e-learning design. It will enable participants to develop and/or improve their digital skills in instructional design, e-learning content development and adapting to online teaching methods.

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LEARNING OUTCOMES

Upon completion of this course, participants will be able to:

- Explore current theories, principles, methodologies, and techniques of online learning to make online courses engaging and to enhance retention and transfer of knowledge,
- Learn how to gather resources and organise them
- Design interactive e-learning solutions that meet learners' needs and adapt to them
- Gain knowledge and skills on how to design e-learning interactions that increase learning effectiveness
- Learn how to make provisions for instructional graphics and user interfaces for online courses, as well as how to integrate supporting material including audio, video, simulations, and games
- Learn how to design and conduct assessments
- Discover how the ITU's Moodle platform works and how to develop ITU's online courses (only for ITU staff and tutors)

TARGET POPULATION

ITU staff and stakeholders wishing to create new online courses or convert their already existing face-to-face courses to online ones.

ENTRY REQUIREMENTS

Basic computer skills. Knowledge of handling multimedia resources such as image and sound processing and knowledge of different digital file formats (png, jpeg, .ai, pdf, mp4, mp3, gif, etc) will be advantageous.

Access to the ITU Academy online platform with a stable Internet connection.

TUTORS/INSTRUCTORS

Online self-paced course. The course can be completed within 6 working hours.

TRAINING COURSE CONTENTS

The topics covered in this module are:

Module 1

Topics	Contents
• **Introduction and objectives**	Presentation of the module

• **Instructional design and elearning**	- What is called instructional design and e-learning - Advantages and disadvantages of e-learning - Definition of Instructional Systems Designs, E-learning and blended learning; synchronous vs asynchronous - Determine when e-learning is an appropriate solution
• **Instructional design models**	Presentation of the following different models with the help of open infographics/audio: - ADDIE - Dick and carey Systems Approach Model - Rapid ISD Model - Successive Approximation Model (SAM) - AGILE method for e-learning development
• **Learning theories**	Introduction/overview to learning theories: - Behaviorism - Cognitivism - Constructivism - Concept of Andrew Georgie - Adult learning principles - Ruth Clarck's principles
• **Learning styles and how to mix them**	Presentation of the following styles with the help of open infographics/audio: - VAK learning styles - Kolb's learning styles - Generational learning styles
• **Keep your students motivated!**	Presentation of the following models with the help of open infographics: - Intrinsic or extrinsic motivation - Arc model of motivational design **Quiz with immediate feedback** **Multimedia contents** **Task**: Using the ARC's model, think of some motivational activities to include in your course. Remember that even the most interesting and useful content will neither increase learners motivation nor guarantee information retention.
• **How memory works?**	Presentation of the following concepts: with the help of open infographics: - Long term short term and working memory - George Miller's magical number and how it relates to learning design - The cognitive load theory and things you can do to avoid cognitive load **Quiz with immediate feedback and activity** **Multimedia contents**

Module 2

Topics	Contents
• **Introduction and objectives**	Presentation of the module
• **Analyse your needs!**	This lesson will cover: - The importance of analysis in instructional design - Audience analysis, performance gap analysis, and task analysis - Data collection methods and techniques - Steps in conducting needs analysis

• **Define your learning objectives**	This lesson will cover:
	- Learning objectives vs learning outcomes in course design
	- The ABCD format of LO
	    ○ Audience
	    ○ Behavior
	    ○ Condition
	    ○ Degree
	- How to create SMART terminal and enabling objectives
	- Bloom's taxonomy and learning domains
	- The 5 stages of understanding
	- The new approach to writing learning objectives

• **Draw up/Outline your course plan**	This lesson will cover: - Presentation of the importance to outline the course plan with concrete examples and models to follow
• **Identify resources and contents needed to construct/develop your course**	This lesson will cover: - Work with SME (subject matter experts) if trainee are not - SME - Based on the general lesson plan, evaluate the necessary contents and resources already existing and those to be developed (by whom and how).

• **Mediatise your course and design your storyboards**	This lesson will cover, supported by concrete examples:
	- The importance of multimedia contents in e-learning and when and how to use/create them:
	    ○ Audio
	    ○ Video
	    ○ Infographics
	    ○ Animation
	- How to design a storyboard
	- Links on OER/Graphic resources)

Module 3

Topics	Contents

• **Introduction and objectives**	Presentation of the module	
• **What is interactivity? What does interactivity stands for?**	This lesson will cover: - Definition and role of interactivity in e-learning courses - LMS tools/features to create interactivity (Chats, forums, Zoom, etc.)	
• **The 4 levels of interactivity**	This lesson will cover: - Presentation and examples for each level (including simulation games)	
• **Navigation**	This lesson will cover: - Linear vs non-linear (branched) navigation	

Module 4

Topics	Contents
• **Introduction and objectives**	Presentation of the module
• **The role of assessment**	This lesson will cover: - Definition and role of assessment in e-learning courses. **Multimedia contents**
• **The different types of assessment**	- multiple-choice, - true/false, - fill-in-the-blank - drag & drop - Case study - Visual conference - Chat - Forum - … **Multimedia contents** **Examples**
• **How to write effective assessment**	Models & examples
• **Provide corrective and relevant feedback**	The importance of remediation and feedback

Module 5

Topics	Contents
• **Introduction and objectives**	Presentation of the module NB: It will provide general knowledge on Moodle and for those participants, who are tutors in the ITU Academy or are

		ITU staff, specific knowledge on the ITU Academy Moodle LMS.
•	**Discover E-learning authoring tools and LMS**	This lesson will cover: - Presentation of various e-learning authoring tools and LMS (including open source ones)
•	**Discover the ITU platform: Moodle 3.5 and how it works**	- Presentation of Moodle: tools; features. - Links to tutorials found online for each useful feature.

METHODOLOGY (Didactic approach)

This course is designed to be followed through a self-paced approach, where the learner works at their own pace. Module after module, the learner is invited to build their own course through specific tasks. The learner is provided with access to numerous open multimedia resources that will allow them to mediatize their contents in a technical way, depending on your knowledge.

EVALUATION AND GRADING

Each module will offer an assessment of knowledge through quizzes and/or activities that will enable the learner to obtain, at the end of his or her training, and after passing a final exam, a badge attesting to his or her new skills.

TRAINING COURSE COORDINATION

ITU coordinator:	Name: Halima Letamo Email address: hcbmail@itu,int

REGISTRATION

Registration should be made online at the ITU Academy portal.
To be able to register for the course you MUST first create an account in the ITU Academy portal at the following address:
https://academy.itu.int/index.php/user/register

Training course registration

When you have an existing account or created a new account, you can register for the course online at the following link: https://academy.itu.int/training-courses/full-catalogue/how-design-and-develop-online-courses

You can also register by finding your desired course in our training catalogue https://academy.itu.int/index.php/training-courses/full-catalogue