



Who Needs to do What for the ITU Academy

Prof. Dr. Toni Janevski

Faculty of Electrical Engineering and Information Technologies
Ss. Cyril and Methodius University, Skopje

Email: tonij@feit.ukim.edu.mk



ITU Academy e-learning courses trends

- Use of emerging Internet-based technologies
- Variety of curricula to fit different target student groups
- Good course development preserves individuality of instructor's teaching style
- A perfect online course is a process, not a goal
- Design and build spontaneity into your course
- Reach out and touch your students with your course work
 - However, it depends upon the professor/instructor/tutor



Structure and design

Hypermedia Structure

- Allows individual to access a multitude of pages

A screenshot of a web browser displaying a Moodle course page. The browser's address bar shows 'academy.itu.int/moodle/course/view.php?id=502'. The page has a blue header with the text 'Dates: 29 May - 25 June 2012'. On the left, there is a sidebar menu with options: 'Backup', 'Question bank', 'Repositories', 'Switch role to...', and 'My profile settings'. The main content area features a navigation pane with 'Open' and 'Close all toggles.' buttons. Below this, there are several expandable sections: 'Certification - Toggle', 'Introduction - Toggle', and 'Module 1: Internet fundamentals - Toggle'. The 'Module 1' section is expanded, showing the following content:

MODULE 1

The Internet has invaded most aspects of life and society, changing our lifestyle, work, communication and social interaction and giving us expectations about new forms of interactions, access to global knowledge and decrease of the digital divide. On the other side, the current Internet has lack of mobility, different protocols taking roles for which they weren't originally designed, quality of service support for different types of services, security vulnerability, etc. Therefore, the Internet needs continuous improvement and evolution towards the future.

This module is dedicated to current Internet protocols and technologies, just to refresh your knowledge about the Internet and to prepare you for the following modules in this course. Hence, it covers the Internet fundamentals of today, including TCP/IP architecture and standardization, client-server and peer-to-peer networking, Internet protocols (IPv4, IPv6, TCP, UDP), addressing and numbering in the Internet. Further, this module includes Internet routing principles, the most important Internet services (WWW, FTP, e-mail, BitTorrent, Skype, Social Networking), as well as the Internet governance.

TRAINING MATERIALS for Module 1 (Week 1)

- Module 1 - Internet Fundamentals (All-Participant)

Topics discussion: MODULE 1

- Forum for Module 1: Internet Fundamentals (All-Participant)

Quiz for Module 1

- Quiz for Module 1 (All-Participant)

Below the main content, there are more expandable sections: 'Module 2: Broadband Internet access - Toggle', 'Module 3: Future Internet and NGN - Toggle', and 'Module 4: Future Internet services: technology, regulation and business aspects - Toggle'. The right side of the page has a vertical scrollbar and a 'Topic' column with numbers 1 through 6.



Advantages of the e-learning

- Class work can be scheduled around personal and professional work
- Reduces travel cost and time to and from school, university or training centre
- Learners may have the option to select learning materials that meets their level of knowledge and interest
- Learners can study wherever they have access to a computer and Internet
- Self-paced learning modules allow learners to work at their own pace
- Flexibility to join discussions in the threaded discussion areas at any hour
- Different learning styles are addressed and facilitation of learning occurs through varied activities



Disadvantages of the e-learning

- Unmotivated learners or those with poor study habits may fall behind
- Lack of familiar structure and routine may take time to getting used to
- Students may feel isolated or miss social interaction
- Instructor may not always be available on demand
- Slow or unreliable Internet connections can be frustrating
- Some courses such as traditional hands-on courses can be difficult to simulate in e-learning



Sub-Objectives of the ITU Academy

- To work with members, stakeholders and partners in setting **priorities for ICT training**, development and human capacity-building;
- To commission the **design of training**, development and human **capacity-building** solutions in response to agreed priorities, drawing on the services of recognized experts;
- To create a **library of ICT learning** and human capacity-building resources;



Activities to Deliver the Objectives

- **Creating a web portal** as a single point of entry to all ITU training products and services, together with a service catalogue.
- Coordinating all human **capacity-building** activities, providing a strategic development framework for future training design.
- Offering a **showcase** for the ITU's capacity-building solutions.
- Coordinating service delivery through partner organizations such as the global networks of **Centres of Excellence**.





How the target student group influences the content creation?

- For students at the university there is more:
 - Theory
 - Analytical exercises
 - Lab exercises

- For employed participants, the experience shows that e-learning course is good to provide:
 - Less analytical approach with equations (since math is harder to learn on distance)
 - More interdisciplinary approach, such as combination of the technology, as well as business aspects and regulation aspects
 - Of course, there is needed knowledge in different fields to provide higher value into the contents and the course in general



How to increase mutual cooperation between Academia and ITU?

- The cooperation is in fact implemented through the **ITU Academy**, which has been established as the lead agent for all ITU human capacity-building activities
 - Through the network of **Centres of Excellence (CoE)**
 - Through the roster of **experts** used by ITU in different mission
- The “next wave” of CoE (2015-2018) is already defined
- The way to increase the cooperation between ITU and Academia is via cooperation with CoE and experts, because CoE network is the strongest official link.
 - That results in training activities provided via the ITU Academy



How to increase the appeal for trainings offered via the ITU Academy?

- One way is to extend the current portfolio of training programs, and
 - To **continue the successful** programmes with updated curricula
 - To use **multiple delivery channels**: e-learning trainings, face-to-face, blended
 - To use ITU Academy as a medium for **capacity-building** of managers and engineers, but also other with **inter-disciplinary** interests in telecommunications/ICT areas
- With creation and delivery of well structured and well designed courses, considering the ITU-D focus areas:
 - from **World Telecommunication Development Conferences (WTDC)**
- By using **successful practices** (where participants are satisfied) **increase the appeal** for participation in future ITU Academy courses
 - Participants that are satisfied by a given course will join some of next ITU courses, and vice-versa



How to create good e-learning practices?

- Best e-learning practices are created by evolution of courses and the e-learning process by:
 - Finding the most relevant subject areas/sub-areas
 - Preparing quality training materials in timely manner
 - Providing professional and encouraging work
 - Improving the course organization
 - Setting a course scheme that fits participants needs and creates high user experience
 - Focusing on students (i.e., course participants) and what they need:
 - Organization and coordination before, during and after the course
 - Quick response on all queries on all issues (e.g., contents, administration, anything else)
 - Good timing of all events (e.g., modules, forums, quizzes)
 - Consistency in everything related to the e-learning course
 - Efficient post-course administration





Who needs to do what for the ITU Academy?

- ITU and Academia (Professors/Instructors/Experts):
 - To provide **excellence of the training** (including organization, creation, coordination, delivery, and certification)
 - To provide diversity of ITU Academy trainings
 - For **capacity building of all ages**, with focus to ICT professionals
 - To deliver information about a given ITU course to different parties (marketing)
 - To **complement university level education** on long terms
- ITU Academy:
 - To maintain **high reliability** (administrators work)
 - Online payments (where fees are applied) will be beneficial for easy enrolments
 - **Different tools** for courses delivery





Who needs to do what for the ITU Academy?

- Professors, tutors and experts (coming from Academia):
 - To have **pedagogical, technical and administrative skills** for e-learning trainings via the ITU Academy (to learn how ITU Academy works, and how the administration around the course should be done)
 - To **deliver information** about the course to its contacts (colleagues, students), which may be interested to enroll in the given course, and publicly (e.g., web), i.e., to complement the marketing process.
 - To provide **high quality training** on a given topic to a specified target group on a global scale (since ITU is a global organization)
 - That is the best marketing

