



## ICO Online Course:

### Transforming Lectures into Effective Teaching Interventions

#### Goal

Help teachers transform lectures into more effective learning interventions.

#### Rationale

Being an expert in a clinical or a surgical topic does not translate into being a good teacher. To become a good teacher we need a theoretical framework that will help us understand and apply teaching principles and strategies to teaching.

Traditional lectures have ranked very low when measuring their effectiveness.

#### Objectives

By the end of the course, participants will be able to:

- Apply multimedia and adult learning principles when preparing lectures.
- Use different approaches when teaching facts, concepts, procedures, processes and principles.
- Generate knowledge and critical thinking interactions to enhance learning during lectures.
- Use free or low cost software to assist this interactivity
- "Flip the class room" by recording and sharing online lectures to make a better use of classroom time.

#### Target Audience

Medical teachers who want to improve their teaching skills when presenting lectures.

#### Learning Activities

The course will be an online, tutor led and will include:

- Recorded audiovisual lectures
- Selected readings
- Discussion forums
- Hands on sections of course development
- Hands on software training

#### Time Requirements

The course will require 2 to 3 hours a week, depending on the participant's previous experience. The duration of the course is 8 weeks.

## Content

### **Module 1: Introduction and Tutorials**

Goal: Introduce the course and practice the tools we will use.

### **Module 2: Theory and Application of Adult Learning Principles**

Goal: To prepare medical teachers to be able to apply adult learning principles for developing more effective teaching and learning experiences.

Objectives: Participants will be able to

- Describe and apply principles that guide adult learning.
- Describe and apply principles of teaching that will help adult learners learn.

### **Module 3: Planning a Course**

Goal: To help medical teachers develop a stepwise process to develop a course.

Objectives: Participants will be able to

- Write goals and objectives that will help develop effective learning interventions.
- Organize the content in building blocks, with their own particular objectives to facilitate construction of the course.
- Use the concept of "chunking" for organizing the content in effective learning segments.

### **Module 4: Building Course Content**

Goal: To help medical teachers identify adequate teaching strategies for teaching knowledge (facts and concepts), skills (procedures), values and attitudes (principles).

Objectives: Participants will be able to choose and apply the best strategies and media for teaching

- Facts
- Concepts
- Procedures
- Processes
- Principles

### **Module 5: Principles for Building Multimedia Teaching Activities**

Goal: To prepare medical teachers to be able to apply principles for building multimedia teaching activities.

Objectives: Participants will be able to

- Describe and apply the following principles to their teaching interventions
  - Contiguity principle
  - Modality principle
  - Redundancy principle
  - Coherence principle
  - Multimedia principle
- Evaluate teaching interventions prepared by others, and identify improvement opportunities applying the same principles.

## **Module 6: Generating Interactivity With Open Ended & Multiple Choice Questions**

Goal: To make learners play an active role in lectures

Objectives: Participants will be able to develop well-structured open ended and multiple-choice questions to stimulate learning.

## **Module 7: Tools for Making Lectures Interactive**

Goal: To train medical teachers in the use of tools for developing interactive teaching activities.

Objectives: Participants will be able to

- Use "Socrative" and other software to generate interactivity in their face-to-face lectures.

## **Module 8: Putting It All Together**

Goal: Wrap up the course