

ANNEX 2

UNI-TEL e-course: Draft syllabus and questions concerning the material production process

Code of the topic M4-6	Name of the topic Cooperation and engagement of students in science and engineering education	
Names of subject experts		Email
First name	Surname	
Ali Akbar	Safavi	Safavi@shirazu.ac.ir
Ghasem	Salimi	Salimi@shirazu.ac.ir

Learning objectives

- Objective 1: Learners will be introduced to flipped learning in science and engineering education.
- Objective 2: Learners will be introduced to cooperative learning as an instructional model in science and engineering education.
- Objective 3: Learners will understand project-based learning as a strategy for students' engagement in science and engineering education.
- Objective 4: Learners will understand problem-based learning as a strategy for students' engagement in science and engineering education.
- Objective 5: Learners get an overview of how we can use team-based learning as a strategy for students' engagement in science and engineering education.
- Objective 6: Learners get an overview of how we can use game-based learning as a strategy for students' engagement in science and engineering education.

Objective 7: Learners will be able to analyse how all the above strategies can be invoked in Iranian science and engineering education as a case study.

Content of the topic:

- Fippled learning
- Cooperative learning as an instructional model in science and engineering education
- Project-based learning as a learning and teaching strategy in science and engineering education
- Problem-based learning as a learning and teaching strategy in science and engineering education
- Team-based learning as a learning and teaching strategy in science and engineering education
- Game-based learning as a learning and teaching strategy in science and engineering education
- Real experiences: a case study with various combinations

Evaluation methods and criteria

- Evaluation and assessment of learners' knowledge will be measured immediately after the end of the course via various approaches.
- Audiences will share the other strategies for effectively engaging the students in engineering.



Questions at this point of the process?

Note: add the names of subject experts also in GoogleDrive:

https://drive.google.com/drive/u/1/folders/1Hgmec15bL0vKGill2y01SJioH0ysq77b