**UNI-TEL PROJECT**

**Imam Khomeini International University- Social Sciences Faculty**

**Industrial Management Department**

**Topics:**

**M2-2: Engaging and motivating students with real-world problems in STEM teaching:**

The following methods are used to engage students in the real world:

**In the first method**, in coordination with the relevant unit in the university, students are asked to choose an organization or factory and carry out the course project according to the given instructions. From the beginning of the semester, the student announces in writing how to do the work in 4 reports with an interval of time until the end of the semester. These reports are reviewed and evaluated, and the student experiences the course material in a practical and real way.

**In the second method**, real cases from the industry (in written form or in documentaries) are given, which the student must analyze based on the content of the case.

**In the third method,** the student is asked to film and send the experience he has gained from doing some of the course content with a mobile phone.

**In the fourth method in the classroom,** according to the instructions, students are asked to exchange such experiences with each other and review the result in the form of a report and send it for evaluation and grading.

**M2-3: Student engagement and motivation through voluntary subject choice and flexibility in STEM teaching**

**A variety of methods are used to motivate students:**

**First of all,** challenging questions are often asked in the classroom, and I ask for possible answers by addressing some students by name. Then, by summarizing their opinions, the question is answered.

**Second,** in the workshop sessions, cases are given to the student teams to analyze, and the best analysis is given an incentive score, and they are introduced to the virtual class of the class, and their report is placed in the group for modeling.

**Third,** volunteer and gifted students, with prior coordination and planning, are asked to present the subject with the help of the instructor in class. In this type of work, in the key sections of the lesson topic, addressing the students, they are asked to comment on the topic.

**Fourth,** the names of most students are mentioned during the classes. After two or three sessions, students who are not active in the class will be contacted with the help of an assistant, and while investigating the cause of the lack of work and helping to eliminate it, they will be asked to participate in the next active classes. The subject is constantly followed by the teacher and the assistant

**M2-5: Case example(s) of online implementations of STEM**

**Examples of students engaging in a real-world example:**

The first case: People who have worked in a specialized field related to the course for many years are asked to attend the class and share their experiences with the students. At the end of such sessions, students are asked to submit a report on their experience with their help and the program that has been developed. Such as: experience with software BPMS.

In the second method, real cases from the industry (in written form or in documentaries) are given, which the student must analyze based on the content of the case. Like YouTube videos about product line layouts as well as work accident videos.

In the third method, the student is asked to film and send the experience he has gained from doing some of the course content with a mobile phone. Like method "5S", where the student documents and critiques the existing conditions of the work environment in the factory environment by taking photos and making videos. Also, the method "SMED" that the student deals with the strengths and weaknesses of the method in the factory by filming how to change the mold in the factory and adapting it to the standard method.

**M6-1: Strategies and policies supporting development**

**Strategies and policies used include:**

**The first** case is teaching as a continuous process in the form of teaching, then evaluation and feedback to students each week.

**Second**, engaging the student in the real world with diverse and complementary forms.

**Third,** the classroom administration interactively addresses directly with the student's name to provide feedback and participate in class discussions.

**Fourth**, holding a workshop with teamwork at appropriate intervals for practice.

**Fifth,** display of students' acquired scores in Excel format in the classroom for transparency and competition.

**Sixth**, distribution of the total score during the semester based on the results of students' work.

**Seventh,** class management is based on the instructions and regulations governing the class, which are announced and taught at the beginning of the semester.

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