

## Applied Quality and Environmental Management

Code: MK5AMINM04GX17-EN

ECTS Credit Points: 4

Evaluation: mid-semester grade

Year, Semester: 1<sup>st</sup> spring semester

Its prerequisite(s): -

Further courses are built on it: Yes/No

Number of teaching hours/week (lecture + practice): 2+2

### Topics:

The aim of the course is to introduce students to the company's quality management and environmental management techniques, the application of which in the European Union, as well as in Hungary, is an essential element of market competitiveness.

### Literature:

Compulsory:

- Sven Erik Jørgensen, Joao Carlos Marques, Søren Nors Nielsen, Integrated Environmental Management: A Transdisciplinary Approach, CRC Press, 2015, ISBN 9781498705103
- Kanishka Bedi: Quality Management, Oxford, 2016

## Schedule

<b>1<sup>st</sup> week:</b> Registration week	
<b>2<sup>nd</sup> week:</b> <b>Lecture:</b> Basics of Quality management <b>Practice:</b> Analyze examples	<b>3<sup>rd</sup> week:</b> <b>Lecture:</b> The role of quality management in the industry <b>Practice:</b> PDCA project
<b>4<sup>th</sup> week:</b> <b>Lecture:</b> Process Management <b>Practice:</b> Create a flowchart	<b>5<sup>th</sup> week:</b> <b>Lecture:</b> Quality Planning <b>Practice:</b> Developing a Quality Plan
<b>6<sup>th</sup> week:</b> <b>Lecture:</b> Quality Management Methods I. <b>Practice:</b> Ishikawa, Pareto Analysis, 5W	<b>7<sup>th</sup> week:</b> <b>Lecture:</b> Quality Management Methods II. <b>Practice:</b> QFD, Kano model, 5s, 8D report
<b>8<sup>th</sup> week:</b> 1 <sup>st</sup> drawing week	
<b>9<sup>th</sup> week:</b> <b>Lecture:</b> Industrial ecology and sustainability <b>Practice:</b> Investigating case studies	<b>10<sup>th</sup> week:</b> <b>Lecture:</b> Environmental factors and environmental impacts <b>Practice:</b> Impact Sheet, Leopold Matrix, ABC Analysis, Eco-mapping
<b>11<sup>th</sup> week:</b> <b>Lecture:</b> Life cycle assessment, analysis of life-cycle phases <b>Practice:</b> Life cycle analysis	<b>12<sup>th</sup> week:</b> <b>Lecture:</b> Environmental audit and benchmarking <b>Practice:</b> Creating an audit plan
<b>13<sup>th</sup> week:</b> <b>Lecture:</b> ISO 14001 standard <b>Practice:</b> Tasks about the standard	<b>14<sup>th</sup> week:</b> <b>Lecture:</b> Process of assessing environmental performance <b>Practice:</b> The relationship between environmental indicators and performance appraisal
<b>15<sup>th</sup> week:</b> 2 <sup>nd</sup> drawing week	

## **Requirements**

### **A, for a signature:**

Participation at lectures is compulsory. Students must attend lectures and may not miss more than three of them during the semester. In case a student does so, the subject will not be signed and the student must repeat the course. Attendance at lectures will be recorded by the lecturer. Being late is equivalent with an absence. In case of further absences, a medical certification needs to be presented. Missed lectures must be made up for at a later date, being discussed with the tutor.

Students have to write two midterm tests during the semester. The first (40 points max) in the 8th, the second (40 points max) in the 14th week. At the end of the semester everybody will get a seminar grade on the basis of the following (score/grade): 0-39 = fail; 40-50 = pass (2); 51-60 = satisfactory (3); 61-70 = good (4); 71-80 = excellent (5).

If somebody fails then he has to write both tests in the 1st week of the exam period again. If the result is 40 points (50%) or better, then he can take an exam. If somebody has to repeat his midterm tests then his seminar grade can't be better than (2).

There will be homework from week to week. Only students who have handed in all their homework at the time of the midterm test will be allowed to write it. The problems in the midterm tests will be selected from the homework assignments.

### **B, for a grade:**

For their exam everybody will get an exam grade. The final grade will be the average of the seminar and exam grade. If it is for example (3.5) then the lecturer decides if it is (3) or (4).