

## Tárgytematika / Course Description

### Process Management

KGNM\_MMTA012

Tárgyfelelős neve /

Teacher's name: dr. Süle Edit

Félév / Semester: 2021/22/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 2/0/0

Tárgy féléves óraszám /

Teaching hours(sem.): 0/0/0

### OKTATÁS CÉLJA / AIM OF THE COURSE

The aim of this course is to establish the process based approach and problem solving by providing students theoretical and practical experience in the field of operations management. During the course students learn a variety of lean, agile and quality improvement methods for broadening the set of methodology, in order to manage and/or redesign of supply chain and operations processes. The course presents state-of-the art scientific sources, best practices by guest lecturers from business sector and practical examples, company cases for discussion. During the course an active involvement is demanded from students, allowing them to learn not only from the lectures, but also from each other.

#### The course is designed

To consider the organization in its wider context;

- To understand the interaction of internal/external process structure and operation.
- To identify and examine SC processes, i.e. how inputs on the supply side can be managed and improved, and on the demand side how customers, and customer demands can be understood and satisfied in an effective way.
- To learn methodologies, concepts, techniques, tools and methods provide solutions how industrial and service value-added business processes can be created, measured, evaluated and improved in lean or agile environment.
- To know innovative technologies applied in industry 4.0, to improve visibility and efficiency of SC material and information processes.

### TANTÁRGY TARTALMA / DESCRIPTION

#### Topics to be covered week by week

Period	Topic
week 1	Introduction to Process Management. Linkage between Operations and Process Management. Key Terms of Process Management.

week 2	Operations Strategy as a Competitive Advantage. Developing Operations Strategy. Sustainability.
week 3	Designing Business Processes. Efficiency, effectivity, productivity.
week 4	Process Analysis. Process Mapping.
week 5	Planning and controlling enterprise processes.
week 6	Process improvement. Kaizen. Reengineering.
week 7	Developing lean and/or agile operations. Wastes. Responsiveness.
week 8	Lean tools and methods. Agile tools and methods.
week 9	Process performance indicators. Performance evaluation.
week 10	Quality management. Quality awards. SPC. 6Sigma. TQM.
week 11	Managing projects. Tools and technics.
week 12	Operations improvement.
week 13	Industry 4.0. Digitalization. IIoT. Elements and operations of innovative processes.
week 14	Smart solutions. Smart factory. Smart supply chain.

## **SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESMENT'S METHOD**

Semester work:

Active participation in class and/or small group discussions. Class attendance will not be systematically registered; however, attendance is recommended for a productive learning.

Evaluation:

The course completion is by the semester work and requirements of written exam in online quiz in moodle. The questions based on theoretical topics and calculations related to process parameters. Education material with questions are available in moodle.

**Grades:**

0 - 50 %	fail
51 - 66 %	pass
67 - 79 %	satisfactory
80 - 89 %	good
90 - 100 %	excellent

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**KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL****Teaching material**

Teaching materials synthesizing the topics discussed in class will be distributed via the online platform moodle (szelearning.sze.hu).

**Required reading:**

Bamford, D.- Forrester, P.: Essential Guide to Operations Management: Concepts and Case Notes. Wiley, 2010.

**Recommended reading:**

- 1) Stevenson, William J.: Operations Management: Theory and Practice, 11th Edition, McGraw.Hill. 2012.
- 2) Johnson, R.- Clark, G.: Service operations management: improving service delivery, FT Prentice Hall; London. 2012.
- 3) Heizer, J.- Render, B.- Munson, C.: Operations Management. Pearson, Twelfth Edition, 2017.
- 4) Slack, N,- Chambers, S.- Johnston, R.: Operations Management. Ft. Prentice Hall, Sixth Edition, 2010.

*Students are recommended to study the recommended reading and other materials distributed through the online platform, also attend the guest lectures; It is possible that not all the arguments constituting the course program are covered in class; students are required to study individually these subjects.*