

Tárgytematika / Course Description

Process Management

KGLM_MMTA012

Tárgyfelelős neve /

Teacher's name: dr. Süle Edit Félév / Semester: 2022/23/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszáma / Tárgy féléves óraszáma /

Teaching hours(week): 0/0/0 Teaching hours(sem.): 12/0/0

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.

To consider the organization in its wider context;

- To understand the interaction of internal/external process structure and operation.
- To identify and examin of 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, technics, 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

| Időszak | |
|---------|---|
| 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. |
|---------|--|
| week4 | 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

The course can be completed by end-term exam with questions related to theoretical and methodological knowledge and calculation of process indicators. Pre-exam is possible based on demands.

Grades:

| 0 - 50 % | fail |
|-----------|------|
| 51 - 66 % | pass |

67 - 79 % satisfactory

80 - 89 % good

90 - 100 % excellent

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. Whiley, 2010.

Recommended reading:

- 1. Stevenson, W.: Operations Management McGraw-Hill Education; 14th edition, 2020.
- 2. Slack, N. Brandon-Jones, A.: Operations and Process Management. Global Edition, Pearson, 2021.
- 3. Johnson, R.- Clark, G.: Service operations management: improving service delivery, FT Prentice Hall; London. 2012.
- 4. Heizer, J.- Render, B.- Munson, C.: Operations Management. Pearson, Twelfth Edition, 2017.

More readings and further materials with instructions regarding the literature to study individually will be given during the course.

Students are recommended to study the learning materials distributed through the online platform; studying the presentations synthesizing the topics discussed in class is insufficient to ensure a productive learning. Not all the arguments constituting the course program are covered in class; students are required to study individually these subjects.