uc3m Universidad Carlos III de Madrid

Operations Management

Review date: 28/04/2023 18:52:31 Academic Year: (2023 / 2024)

Department assigned to the subject: Business Administration Department

Coordinating teacher: ALVAREZ GIL, MARIA JOSEFA

Type: Compulsory ECTS Credits: 6.0

Year: 2 Semester: 2

OBJECTIVES

Skills and competences:

.Development of individual learning routines via the analysis of relevant texts and the collection and analysis of recent real evidence.

- . Development of group-based learning routines via group-based discussion and the oral and written presentation of work by teams.
- . Development of verbal and written communication skills.
- . Develop the ability to raise questions and answer them.

Knowledge:

- Know and understand the objectives and strategies of the Operations Management.
- Know and understand the main concepts and models associated with quality.
- Know and understand the foundation of the design and development processes of goods and services.
- Know and understand the processes of generation of goods and services and the corresponding distribution in plant of the facilities.
- Know and understand decisions about location and capacity.
- Know the planning of the necessary resources in the generation of goods and services.
- Apply all the previous points to problem solving.

Abilities:

- Ability to make decisions.
- Ability to work individually, prioritizing the accuracy and precision of the results.
- Capacity for teamwork.
- Ability to relate to others.
- Ability to adapt to new situations.
- Ability to accept other points of view.

Attitudes:

- Ability to search and curiosity.
- Have an enthusiastic attitude to solve problems.
- Defend and justify certain actions.

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Operations Management in context, managing Operations strategically
- 2. Project Management
- 3. Designing Business Processes and Capacity
- 4.-Total Quality Management
- 5. Capacity Design and lay-Out Planning (chapters 8 and 9)
- 6. Designing Products and Services, sustainable Operations Management
- 9. Sustainable Operations Management and Circular Economy

LEARNING ACTIVITIES AND METHODOLOGY

Knowledge and attitude competencies will be acquired by the students through lectures, practical classes to solve exercises, individual performance of exercises, and team work to solve cases. Skills will be developed through individual work, classroom participation and collaboration with peers. The course will be developed as follows: Students will receive information via Aula Global 2 on the theoretical and practical contents of the course. As far as possible, the principles of the flipped classroom approach will be applied. That is to say, students are provided with the guides to follow to study the different chapters of the program and in the lectures and small classes possible doubts are discussed and knowledge is deepened. The practical exercises to be developed by the students individually are linked to the topics of the syllabus and the practices carried out in small groups. The team work will be developed throughout the term according to the instructions provided by the coordination of the subject. The methodology to be used for the team work will be based on the case method. The professors of the course will attend the students in the tutoring schedules always by appointment, always looking for the best allocation of resources. Af1: theoretical-practical classes. In them we present the knowledge that we expect the students to acquire. Students will receive class notes and will have basic reference texts to facilitate the preparation of virtual classes (flipped classroom approach) and their follow-up and development of the subsequent continuous assessment work. In the small group sessions, doubts about the exercises proposed by the teacher will be answered and workshops and evaluation tests will be provided to facilitate the acquisition of the necessary skills. AF2: tutorials. Individualized and group assistance through specific open sessions through blackboard collaborate. AF3: individual and/or group work of the student MD1: Theory class: class presentations by the professor (virtual in the covid19 scenario) in which the main concepts of the subject are developed and the materials and bibliography are provided to complement student learning. MD2: Practicals: resolution of mini-case studies, exercises, readings, watching videos proposed by the professor to be carried out individually and in teams. MD3: Tutorials: 4 hours per week, upon request of the student, which are developed with the virtual computer applications provided by the Universidad Carlos III de Madrid, with personalized and group assistance. All course material will be posted and password-protected in Aula Global, including a selection

of academic articles.

ASSESSMENT SYSTEM

% end-of-term-examination/test:

0

% of continuous assessment (assignments, laboratory, practicals...):

100

To evaluate the knowledge, skills and abilities achieved by students in the course, we will use two options: a continuous evaluation mechanism and an ordinary global exam. Students will have a period of 30 calendar days to confirm which of these options they will follow. Those who opt for continuous evaluation will not have the option of taking the regular comprehensive exam. In the same way, those who opt for the single evaluation by means of an ordinary global exam will not have to take the tests of the continuous evaluation modality. In the continuous evaluation modality, two types of tests are developed: test-type exercises (2) and group work (2). Regarding the multiple-choice multiple-choice exercises with theoretical-practical content, each one can offer a maximum score of 25% of the total grade of the course. Regarding the 2 group work deliveries, with theoreticalpractical content, each one can offer a maximum score of 25% of the total grade of the course. The evaluation criteria will be distributed together with the necessary material to be able to carry out the work. Page 2 of 4 VERY IMPORTANT NOTE The passing of the course requires the passing of each and every one of these four tests, without considering the option of averaging grades between some tests and others. In other words, each of the four tests must be passed. In order to pass each test, a grade greater than or equal to 50% of the maximum possible score for that test must be obtained. For those who do not pass the minimum evaluation in any of the four tests mentioned above, the possibility is offered of taking a complementary theoretical-practical test focused on the sections not passed in the continuous evaluation. This complementary test will be held at the same time as the ordinary global exam. All students who opt for the continuous evaluation modality must take these four tests. In the hypothetical case that a student does not pass one or more of the tests after taking the complementary test, it will be considered that the subject has not been sufficiently passed and the student will have to take the final or extraordinary exam with the totality of the subject matter. (In other words, partial passes will not be kept) Regarding the ordinary global exam, this is designed to attend those who have not opted for the continuous evaluation modality. Its content will be the syllabus seen during the course and the exams will consist of two sections: Theory and Practical. The weight of each of them in the composition of the final grade is as follows: THEORY 50% and PRACTICAL 50%. The maximum score to be obtained in the ordinary comprehensive exam may never exceed the limits established in the UC3M regulations in this regard. The ordinary comprehensive exam is not the way to improve the final grade of the course. Percentage weight of the Ordinary Comprehensive Exam: 0 Percentage weight of the rest of the evaluation: 100 Students who do not pass the course in either of these two options have the possibility of taking the final exam, or extraordinary exam, on the date set by the University. This exam covers the content of the subject taught during the course and the maximum score to be obtained may never exceed the limits established in the UC3M regulations in this regard. The final or extraordinary

% end-of-term-examination/test: 0 % of continuous assessment (assignments, laboratory, practicals...): 100

exam is the mechanism to improve the grade for those who have already passed the subject with a grade equal to outstanding and want to demonstrate that they can opt for the best grade. In these cases, the coordination of the course will specify the characteristics of the test to be performed. Percentage weight of the Final Exam: 0 Percentage weight of the rest of the evaluation: 100

BASIC BIBLIOGRAPHY

- Heizer, Jay; Render, Barry, Dirección de la producción y de operaciones. Decisiones estratégicas, 11a edición, pearson, 2015

ADDITIONAL BIBLIOGRAPHY

- Jack R. Meredith, Samuel J. Mantel Project Management: A Managerial Approach, 7th Edition, wiley, 2009
- Andrew Greasley Operations Management, 2nd Edition, Wiley, 2009
- David Bamford, Paul Forrester Essential Guide to Operations Management: Concepts and Case Notes, Wiley, 2009
- Jack R. Meredith Operations Management, 4th Edition, Wiley, 2010
- John Mangan, Chandra Lalwani, Tim Butcher Global Logistics and Supply Chain Management, Wiley, 2008
- R. Dan Reid, Nada R. Sanders Operations Management: An Integrated Approach, 4th Edition, Wiley, 2010
- Roberta Russell Operations Management: Creating Value Along the Supply Chain, 7th Edition, Wiley, 2011
- Samuel J. Mantel Project Management in Practice, Wiley, 2011