### SYLLABUS 1

#### 1. Information about the program

1.1 Higher education institution	Politehnica University Timisoara
1.2 Faculty <sup>2</sup> / Department <sup>3</sup>	Management in Production and Transportation / Management
1.3 Chair	_
1.4 Field of study (name/code <sup>4</sup> )	Engineering and Management / 207010
1.5 Study cycle	Master
1.6 Study program (name/code/qualification)	Quality and Competitiveness Engineering and Management / 207010

#### 2. Information about discipline

2.1 Name of discipline			Proje	ct Management			
2.2 Coordinator (holder	) of cou	rse activities	SI.Dr. Eng. NEGRUŢ Mircea Liviu			SI.Dr. Eng. NEGRUŢ Mircea Liviu	
2.3 Coordinator (holder	) of app	olied activities 5	SI.Dr. Eng. NEGRUŢ Mircea Liviu				
2.4 Year of study 6	2	2.5 Semester	3	2.6 Type of evaluation	E	2.7 Type of discipline	DA

#### Total estimated time (direct activities (fully assisted), partially assisted activities and unassisted activities <sup>7</sup>)

3.1 Number of hours fully assisted/week	4 ,of which:	3.2 course	2	3.3 seminar/la	boratory/project	2
3.1* Total number of hours fully assisted/sem.	56 ,of which:	: 3.2* course 28 3.3* seminar/laboratory/project		aboratory/project	28	
3.4 Number of hours partially assisted/week	of which:	3.5 project, research		3.6 training	3.7 hours designing M.A. dizertation	
3.4* Number of hours pasrtially assisted/ semester	of which:	3.5* project of research		3.6* training	3.7* hours designing M.A. dizertation	
3.8 Number of hours of unassisted activities/ week	3,5 ,of which:	nich: Additional documentation in the library, on specializ electronic platforms, and on the field			1	
		Study using and lecture r		nual, course mat	terials, bibliography	1
		•		ninars/ laborator folios, and essay		1,5
3.8* Total number of hours of unasssited asctivities/ semester	49 ,of which:			entation in the lib	orary, on specialized	14
		Study using and lecture r		nual, course mat	terials, bibliography	14
				ninars/ laborator folios, and essay		21
3.9 Total hrs./week 8	7,5					
3.9* Total hrs./semester	105					
3.10 No. of credits	5					

### 4. Prerequisites (where applicable)

4.1 Curriculum	•
4.2 Competencies	•

<sup>&</sup>lt;sup>1</sup> The form corresponds to the Syllabus promoted by OMECTS 5703/18.12.2011 (Annex 3), updated based on the Specific Standards ARACIS of December 2016. <sup>2</sup> The name of the faculty which manages the educational curriculum to which the discipline belongs

<sup>&</sup>lt;sup>3</sup> The name of the department entrusted with the discipline, and to which the course coordinator/holder belongs.

Fill in the code provided in HG no. 376/18.05.2016 or in HG similars annually updated.

The applied activities refer to: seminar (S) / laboratory (L) / project (P) / practice/training (Pr).

The applied additions of the control of the strength of the st 3.4 şi 3.8 are keys of verification used by ARACIS under the form:  $(3.1)+(3.4) \ge 28$  hrs./week and  $(3.9) \le 40$  hrs./week.

<sup>&</sup>lt;sup>8</sup> The total number of hours/week is obtained by summing up the number of hours from 3.1, 3.4 şi 3.8.

# 5. Conditions (where applicable)

5.1 of the course	Support materials: projector, laptop, whiteboard
5.2 to conduct practical activities	Laboratory with computers and software, projector, laptop, whiteboard

# 6. Specific competencies acquired through this discipline

Specific competencies	Acquiring skills in defining the structure of project, the necessary resources, planning activities and obtain an overview of projects and specific tasks of the project team members.
Professional	C1- The correct and appropriate application of the adequate theoretical and practical notions of the domain and specialization knowledge.
competencies	C4 – Critical and constructive analysis to improve projects, processes, engineering and managerial systems.
ascribed to the	C5 - Determining and evaluating critical success factors of organizational competitiveness indicators.
specific	
competencies	
Transversal	CT1 – Development of analytical, synthetic, comparative and critical thinking, adaptability and communication ability in different situations and conditions.
competencies	CT2 - Identifying roles and responsibilities in an interdisciplinary team and applying relationship and
ascribed to the	collaboration techniques within the team, demonstrating initiative spirit and innovative capabilities in physical and virtual environments.
specific	CT3 – Identifying opportunities for continuous training and efficient use, for personal and professional
competencies	development, of information and training sources, both in Romanian and in an international language.

# 7. Objectives of the discipline (based on the grid of specific competencies acquired)

7.1 The general objective of the discipline	<ul> <li>The objective of the course is to provide students the skills needed to manage the projects in terms of the three iron objectives of the projects: time, cost and quality. This knowledge's are required and can be applied by graduates in their professional work within organizations and firms where they will work.</li> </ul>
7.2 Specific objectives	<ul> <li>The specific objectives of the course focus on assimilation of the theoretical and practical knowledge for drawing up the list of activities, project planning methods, resource planning, cost management and budgeting of the project, as well as project control over the implementation period.</li> </ul>

# 8. Content

8.1 Course	Number of hours	Teaching methods
Introduction to Project Management	2	Lecture with
2. Project life cycle and organization	2	PowerPoint
Project structure/scope management, create WBS, defining the Project task	4	presentation, dialogue, examples and case studies.
Setting up and assigning resources. Project time management –     GANTT Chart and CPM	6	studies.
5. Project cost management	4	
6. Project stakeholder and project communication management	4	
7. Project risk management	2	
8. The project manager - HR management	2	
9. Project Quality management	2	

Bibliography <sup>9</sup> 1. Project Management Institute (2017) – A Guide to the Project Management Body of Management – Sixth Edition, Pennsylvania;

- 2. Rodney Turner, (2014) Gower Handbook of Project Management, 5th Edition, Gower, London
- 3. Carl Chatfield and Timothy Johnson Microsoft Project 2013 Step by Step Microsoft Press, Redmond
- 4. Harold Kerzner Ph.D., (2013) Project Management: A Systems Approach to Planning, Scheduling, and Controlling-11th Edition, ISBN-13: 978-1118022276, Jhon Wiley and Sons
- 5. Univ.-Prof. Dr.-Ing. Josef Zimmermann (2011), Principles of Project Management TU Munchen, Lehrstuhl für Bauprozessmanagement und Immobilienentwicklung
- 6. NEGRUŢ Mircea Liviu, Alan Păun, (2010) Tools and Techniques for Projects Control, Scientific Proceedings for 10th International Symposium in Management, Timisoara
- 7. Alan Păun, NEGRUŢ Mircea Liviu, (2009) Problems of Project Management Implementation in SMEs, Proceedings of the 6-th International Conference on Management of Technological Changes, Volume 1, Democritus University of Trace Greece, Alexandroupolis, Greece.
- 8. Albert Hamilton, (2008) Handbook of project management procedures Thomas Telford Publishing, London;
- 9. Dennis Lock, (2007) Project Management, Ninth Edition, Gower, London
- 10. Jason Charvat (2003) Project Management Methodologies Selecting, Implementing, and Supporting Methodologies and Processes for Projects John Wiley & Sons, Inc., Hoboken, New Jersey;
- 11. Cleland D., Ireland L. (2002) Project Management Strategic Design and Implementation, Fourth Edition, McGraw-Hill, New York.

<b>8.2</b> Applied activities <sup>10</sup>	Number of hours	Teaching methods
Introduction to Microsoft Project	2	Defining a project,
2. Basics of Scheduling: Starting a new plan;	4	resources, and making the time and cost
Building a task list;		
Working with resources: Setting up resources;	4	planning, working in a computers laboratory,
Assigning resources to tasks;		using the specific
4. Advanced task scheduling: Gantt Chart;	6	software tool "Microsoft
CPM - Network Diagram;		Project", learning to
		manage and to control a project.
5. Viewing and reporting project status;	4	
6. Tracking progress: Tracking progress on tasks and assignments;	4	
7. Evaluation and examination.	4	

Bibliography <sup>11</sup> 1. Project Management Institute (2017) – A Guide to the Project Management Body of Management – Sixth Edition, Pennsylvania:

- 2. Rodney Turner, (2014) Gower Handbook of Project Management, 5th Edition, Gower, London
- 3. Carl Chatfield and Timothy Johnson Microsoft Project 2013 Step by Step Microsoft Press, Redmond
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- 8. Albert Hamilton, (2008) Handbook of project management procedures Thomas Telford Publishing, London;
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- 11. Cleland D., Ireland L. (2002) Project Management Strategic Design and Implementation, Fourth Edition, McGraw-Hill, New

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<sup>&</sup>lt;sup>9</sup> At least one title must belong to the department staff teaching the discipline, and at least one title must refer to a relevant work for the discipline, a national and international work that can be found in the UPT Library.

10 The types of applied activities are those mentioned in 5. If the discipline containes more types of applied activities then they are marked, consecutively, in the table

<sup>&</sup>lt;sup>10</sup> The types of applied activities are those mentioned in 5. If the discipline containes more types of applied activities then they are marked, consecutively, in the table below. The type of activity will be marked distinctively under the form: "Seminar:", "Laboratory.", "Project:" and/or "Practice/Training:".

<sup>&</sup>lt;sup>11</sup> At least one title must belong to the staff teaching the discipline.

York.		

- 9. Coroboration of the content of the discipline with the expectations of the main representatives of the epistemic community, professional associations and employers in the field afferent to the program
- Syllabus is adapted to the requirements of employers, which is formulated and updated through periodic meetings with the professional associations to identify needs and expectations of employers in the field. The employers need specialists who know to manage the company projects, to create the project WBS and define tasks, define resources and create budgets. The knowledge and specific competencies in this domain helps the engineers/managers/directors to manage/achieve the 3 project goals related to time, cost and quality.

### 10. Evaluation

Type of activity	<b>10.1</b> Evaluation criteria <sup>12</sup>	10.2 Evaluation methods	<b>10.3</b> Share of the final grade
10.4 Course	Presentation of theoretical topics presented in the course.	Written exam.	50%
10.5 Applied activities	S:		
	L: Implementing the project management processes on an example, using the Microsoft Project tool.	Laboratory work, presentation and discussions.	50%
	P:		
	Pr:		
	Tc-R <sup>13</sup> :		

- 10.6 Minimum performance standard (minimum amount of knowledge necessary to pass the discipline and the way in which this knowledge is verified 1
  - Getting the grade five to the examination of the course knowledge, and getting the grade five at the practical application using of Microsoft Project software for defining and implementing a project in a technical or economic field.

Date of completion	Course coordinator (signature)	Coordinator of applied activities (signature)	
Head of Department (signature)	Date of approval in the Faculty Council <sup>15</sup>	Dean (signature)	

<sup>12</sup> The Syllabus must contain the evaluation method of the discipline, specifying the criteria, the metods and the forms of evaluation, as well as mentioning the share attached to these within the final mark. The evaluation criteria msut correspond to all activities stipulated in the curriculum (course, seminar, laboratory, project), as well as to the methods of continuous assessment (homework, essays etc.)

<sup>&</sup>lt;sup>13</sup> Tc-R= Homework-Reports

<sup>&</sup>lt;sup>14</sup> For this point turn to "Ghidului de completare a Fișei disciplinei" found at: <a href="http://univagora.ro/m/filer-public/2012/10/21/ghid">http://univagora.ro/m/filer-public/2012/10/21/ghid</a> de completare fisa disciplinei.pdf

<sup>15</sup> The approval is preceeded by discussing the study program's board's point of view with redgards to the syllabus.