# UNIVERSITÀ DEGLI STUDI DI PALERMO

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| **DEPARTMENT** | Ingegneria |
| **ACADEMIC YEAR** | 2022/2023 |
| **MASTER'S DEGREE (MSC)** | MANAGEMENT ENGINEERING |
| **SUBJECT** | ADVANCED PROJECT MANAGEMENT FOR BUSINESS |
| **TYPE OF EDUCATIONAL ACTIVITY** | B |
| **AMBIT** | 50368-Ingegneria gestionale |
| **CODE** | 22339 |
| **SCIENTIFIC SECTOR(S)** | ING-IND/17 |
| **HEAD PROFESSOR(S)** | MURIANA CINZIA Professore a contratto Univ. di PALERMO |
| **OTHER PROFESSOR(S)** | |
| **CREDITS** | 6 |
| **INDIVIDUAL STUDY (Hrs)** | 96 |
| **COURSE ACTIVITY (Hrs)** | 54 |
| **PROPAEDEUTICAL SUBJECTS** | |
| **MUTUALIZATION** | |
| **YEAR** | 2 |
| **TERM (SEMESTER)** | 2° semester |
| **ATTENDANCE** | Not mandatory |
| **EVALUATION** | Out of 30 |
| **TEACHER OFFICE HOURS** | **MURIANA CINZIA**<br>Thursday 14:00 15:00 Online (Teams), provided that students send an email to cinzia.muriana@unipa.it; in attendance at the Teachers' Office (next to room F190), provided that students book by sending an e-mail to cinzia.muriana@unipa.it, or via the website. |

**DOCENTE:** Prof.ssa CINZIA MURIANA

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| **PREREQUISITES** | Knowledge of Mathematical and statistic concepts. |
| **LEARNING OUTCOMES** | Knowledge and understanding capacity<br>The student will have also the knowledge of the PMI standard and of the PRINCE2 methodology. The acquired knowledge of the PMI standard will help the student in obtaining the CAPM/PMP certifications.<br>Ability to apply knowledge and understanding<br>The student will be able to apply the organizational principles of same project management standards. Finally, he/she will be able to evaluate the project alternatives by means of multi criteria models and to analyze and manage risks project.<br>Judgment autonomy<br>The student will be able to identify the needed data to solve the faced problems, to choose the more adequate methodological approach to the specific problem and to evaluate the goodness of the proposed solutions.<br>Communications skill<br>The student will acquire the ability to communicate with competence and language skills also in specialized context.<br>Learning ability<br>The student will be able to develop the new knowledge in the project management filed |
| **ASSESSMENT METHODS** | A written exam and an oral exam.<br><br>1. Evaluation criteria for the written exam:<br><br>The written exam aims at verifying the ability, capacity and skills acquired during the course such as risk analysis, applications of multi-criteria methodologies, and/or questions on PMBOK and/or PRINCE 2.<br><br>Preliminarily to the written test the student will be informed about the weight of each exercise and/or question and the overall grade will be expressed in thirtieths. If the written exam does not reach at least the sufficiency the written exam is considered not passed.<br><br>2. Evaluation criteria for the oral exam<br>The oral test consists of an interview to verify the ability, capacity and skills acquired during the course, the evaluation is expressed in thirtieths. Questions, both open and semi-structured, aim to verify:<br>a)the acquired knowledge;<br>b)the capability of elaborating;<br>c)the possession of adequate capacity to expose the contents of the course.<br><br>If the oral exam does not reach at least the sufficiency, the exam is considered not passed.<br><br>The final score is formulated taking into account the score of the written exam as well as the score of the oral exam. The final score will be calculated by means of a weighted mean between the score of the oral exam and the written exam. In specific the weight of the written exam is 35% whereas the weight of the oral exam is 65%.<br>Evaluation and criteria:<br>Excellent (30- 30 cum laude): excellent knowledge of the arguments, excellent property of language, good analytic capacity. The student is able to brilliantly apply the knowledge to solve the proposed problems.<br>Very good (26-29): good mastery of the arguments, full language skills. The student is able to apply autonomously the knowledge to solve the proposed problems.<br>Good (24-25): basic knowledge of the main arguments, discrete language skills. The student has limited ability to apply the knowledge to solve the proposed problems.<br>Satisfactory (21-23): the student does not have full competence of the main arguments of the course but he/she possess satisfactory knowledge, adequate language skills and discrete ability to apply the acquired knowledge.<br>Sufficient (18-20): basic knowledge of the main arguments of the course and of the technical language, poor ability to apply the acquired knowledge.<br>Insufficient: the student does not have an acceptable knowledge of the main arguments of the course. He/she has an insufficient ability to apply the acquired knowledge. |
| **EDUCATIONAL OBJECTIVES** | In a context where the project management is a relevant operative approach it is necessary for human resources to own the skills in order to think and manage the project taking into account international standards. The purpose of the course is to offer basic training related to the project management providing to the student the knowledge related to the PMBOK standard and PRINCE2 methodology. Finally, another objective it is to provide the student the ability to use the mathematical models that can help him in the decision making, in the |

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| | ranking of the projects or alternatives and technique to manage the project risks. |
| **TEACHING METHODS** | Frontal lessons and classroom exercises. |
| **SUGGESTED BIBLIOGRAPHY** | THE STANDARD FOR PROJECT MANAGEMENT and A GUIDE TO THE PROJECT MANAGEMENT BODY OF KNOWLEDGE (PMBOK® GUIDE) Seventh Edition - Project Management Institute ED. 2017, ed. PMI<br>Mario Enea ed altri, “Metodologie multicriterio per la selezione dei progetti in ambito FSE”<br>Managing Successful Project with PRINCE2 2017, ed. OGC |

## SYLLABUS

| Hrs | Frontal teaching |
|---|---|
| 2 | Introduction |
| 10 | PMBOK principles (7th edition) |
| 9 | Analysis and Managment of project risks |
| 20 | Method to select the project, decision making methodology: weighted method, AHP, ELECTRE, EVAMIX, PROMETHEE, TOPSIS |

| Hrs | Practice |
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| 4 | Multi criteria techniques |
| 5 | AHP and ELECTRE methods |
| 4 | Risk evaluation techniques |