**COURSE:** Mathematical Physics  
**ACADEMIC YEAR:** 2019/2020  
**TYPE OF EDUCATIONAL ACTIVITY:** Basic  
**TEACHER:** Angelo Raffaele Pace  
-e-mail: raffaele.pace@unibas.it  
-web:  
-phone:  
-mobile (optional):  
Language: Italian

| ECTS: 6 | n. of hours: 36 (lessons) | n. of hours: 24 (practice) | n. of hours: 60 (total) | Campus: Potenza  
School of Engineering  
Program: Mechanical Engineering  
/Civil and Environmental Engineering | Semester: I |

**EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES**

- **Knowledge**: knowledge of the basic laws of mechanics of systems of particles and rigid bodies as well as their consequences.
- **Skills**: to be able to set some basic problems of statics and dynamics. In the case of statics, to be able to calculate the equilibrium positions and to determine the reaction forces. In the case of dynamics, to be able to solve the differential equations of motion in simple situations leading to linear differential equations with constant coefficients.

**PRE-REQUIREMENTS**

Basic knowledge of Mathematical Analysis and Physics I

**SYLLABUS**


**TEACHING METHODS**

Theoretical lessons. Classroom tutorials.

**WRITTEN (NECESSARY) AND ORAL (FACULTATIVE) EXAMINATIONS**

Written (necessary) examination and oral (facultative) examination.

**TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL**

- D’Acunto, Massarotti: MECCANICA RAZIONALE PER L’INGEGNERIA, Maggioli Editore, 2015
- Frosali, Minguzzi: MECCANICA RAZIONALE PER L’INGEGNERIA, Società Editrice Esculapio, 2017

**INTERACTION WITH STUDENTS**

Office hours: Friday 15:00 – 17:00 DiMIE

**EXAMINATION SESSIONS (FORECAST)**

14/02/2020; 24/04/2020; 05/06/2020; 17/07/2020; 02/10/2020; 04/12/2020

**SEMINARS BY EXTERNAL EXPERTS**

YES □ NO □X

1 Subject to possible changes: check the web site of the Teacher or the Department/School for updates.