Contact details

Stavros Athanasopoulos

- E-mail: astavros@fis.uc3m.es
- Office hours: Wednesday 13:00-14:00 and Thursday 16:00-19:00
- Office: 4.0.C01 – TORRES QUEVEDO

HOUSEKEEPING RULES

- Comply with COVID-19 protocols:

  https://www.uc3m.es/covid19/home
- Specific measures:
  https://www.uc3m.es/covid19/specific-measures
- Arrive on time!
- The course is in **ENGLISH**
- During face-to-face groups switch off electronic devices (mobiles, laptops) or use flight mode, disconnect wifi
- Only one person talks at a time
- Behave...
- **Participate!**

Communication

- AULA GLOBAL: https://aulaglobal.uc3m.es

  All info and material will be uploaded to

  M-Group (M2.218.13867-89 MAG. Physics 21/22-S1)

  check daily!

COURSE CONTENTS

1. A review of kinematics and dynamics
2. Atoms and solids
3. Coulomb’s law. Electric Field
4. Gauss’ law
5. Electric potential
6. Conductors
7. Capacitors and dielectrics
8. Electric current
9. Magnetic forces and magnetic fields
10. Semiconductor devices

BASIC BIBLIOGRAPHY

THEORY

SERWAY, RA & JEWETT, JW.

"Physics for scientists and engineers" Brooks/Cole Cengage Learning 2014

TIPLER, PA

"Physics for scientists and engineers: with modern physics" W.H. Freeman

ASSESSMENT SYSTEM

Final exam 60% of final mark

Problems to be solved and short theory questions

Activities in groups 25% of final mark

4 short test exams (the three best marks will be taken into account) (18%)

Delivery and evaluation of the proposed activities by the lecturer (7%)

Laboratory sessions 15% of final mark

4 sessions (100 min. each)

attending the laboratory session and handing-in the reports is **compulsory**

A minimum mark of 3 (over 10) in the final exam will be required in order to pass

SHORT TEST EXAMS: PROVISIONAL DATES

1. Week 5: Oct 6 (group 87), Oct 8 (groups 88, 89)
2. Week 9: Nov 3 (group 87), Nov 5 (groups 88, 89)
3. Week 12: Nov 24 (group 87), Nov 26 (groups 88, 89)
4. Week 14: Dec 9 (group 87 in the magistral class, Dec 8 is holidays!), Dec 10 (groups 88, 89)

TUTORIALS

- All tutorials will be face to face (**request** by email)
- Theory tutorials: Wednesdays 13:00-14:00
- Problem related tutorials: Thursdays 16:00-19:00

LABS

- Stay tuned for dates/groups (LAB 4.S.B02).
- It is mandatory to attend all 4 sessions and handle in all four reports.
- Students who have already taken this lab in the same degree **do not** need to repeat the laboratory.
- Students who have already taken this lab in the same degree **and want** to repeat it, must request the resignation of the previous grade.
- Students who have already taken this lab in another degree at UC3M do not need to repeat the laboratory, they must request its validation.
- Students who come from another university and wish to validate the lab must request it.

PHYSICS EXAM:

Fraud examination (to copy) will lead to a mark of **0 in the corresponding call**, for those who copy and those who help them. The act of copying, apart from failing the corresponding call, may lead to the opening of disciplinary proceedings, whose sanctions include permanent expulsion from the University (See the *Academic Disciplinary Regulations*).