Group 1E:

English Teaching

Class Timetable:

- Theory and problems (14 weeks/term):
 - Tuesday 8-9,30
 Thursday 11-12,30
- Laboratory (10 weeks/term):
 - Friday 8-9,30 (group L1E) or Tuesday 13,00-14,30 (group L2E) (starting on september 21th)
- One week for exams: 2/11-8/11

Professor: Jorge Más Estellés (jmas@fis.upv.es)

- Department of Applied Physics
- Desk 101 (1° floor). 1H Building
- Student's attention (tutorship on line):
 - On-demand tutorship:
 - Tuesday 10,00-13,00
 - Wednesday 18,00-20,00
 - Friday 18,00-19,00

You have to send me a mail to ask for a tutorship.

Tutorships of a group are also possible.

Any question, problem, you can contact me by mail.

Physics Foundations on Computer Science Subject contents. 5 main blocks:

0. Introduction and Prerrequisites (1 week).

- Vectorial calculus, basic derivatives and integrals, trigonometry and determinant computations.
- 1. Electrostatics (4 weeks).
 - The electric field. Electric Potential. Conductors, Insulators, Capacitors,....
- 2. Direct Current (3 weeks).
 - Resistance. Energy. D.C. circuits.
- 3. Electromagnetism (4 weeks).
 - Magnetic Field. Magnetic Forces. Magnetic Induction.
- 4. Alternating Current (A.C.) (1 week).
 - Basic devices behaviour. Filters
- 5. Semiconductors (1 week).
 - Materials and devices. Diode.

Topics you must already know (Prerrequisites):

- 1. Vector calculus:
 - Adition and subtraction vectors. Inner and cross product. Unit vector
- 2. Derivative and integral calculus:
 - Basic integralsDefinite integrals
- 3. Trigonometry:
 - Trigonometric rates

Right triangle

4. Matrix determinant.

Marks:



If Final Mark (FM) < 5 you can sit an exam at the end of the term to retake that part of subject you haven't passed, not having any other chance until next year (neither june nor september)

T&P and Test exams data:

- Theory and Problems exam 1: Exams's week November 2-8th
 - (units 1-5) Electrostatics, Direct current, Electric energy and Electric Networks
- Theory and Problems exam 2: Exams's period January 7-28th
 - (units 6-12) Electromagnetism, A.C. and Semiconductors
- End term exam (retaking only T&P exams): Exams's period January 7-28th

Tests:

Tests will be held on time class before the T&P exams:
 October 28th and December 21th

Very important about exams and lab reports: This subject is a control point for the *cross-curricular* skills "Effective communication" (clear, tidy and good expression when writing or speeching) and "Ability solving problems". At the end of semester, we are requested to assess them: A-Excelent **B-Achieved D-Not achieved C-In progress** This assessment is not related to the final mark of the subject.

Effective communication is assessed from written answers and reports. *Ability solving problems* is directly assessed from the mark of problems in the T&P exams.

Material:

 All the material and information about the subject can be found on web site:

http://jmas.webs.upv.es/ffi/

 This website is under construction and all material, notice or warning will appear in this site.

Material in class:

- The students will be able to download each presentation from the website before the class.
- It's strongly recommended to read the unit before the class. In this way, the student can optimize the study effort.
- Feel you free to ask at any moment in classroom.
- Information about Laboratory practices will be given on first day in Laboratory: Tuesday, September 21th (L2E) or Friday, September 24th (L1E)