

Course Syllabus

PHYSICS III

Printed by: jfmoncay

Program: Telecommunications Engineering

1. Course number and name

FISG1003 - PHYSICS III

2. Credits and contact hours

3 credits and 5 contact hours

3. Instructor's course or coordinator's name

FLORENCIO RAMON PINELA CONTRERAS

4. Text book, title, author, and year

- YOUNG y FREEDMAN. FÍSICA UNIVERSITARIA VOL 2 (DÈCIMO TERCERA)

5. Specific course information

- a. Brief description of the content of the course (catalog description)

Physics II is a theoretical-practical course addressed to engineering students that contributes with the learning of the concepts of magnetism, Maxwell equations and optics in an active learning environment.

- b. Prerequisites

PHYSICS II - FISG1002

- c. This course is: Required

6. Specific goals for the course

- a. Specific outcomes of instruction

1.- Apply the laws of magnetism in the description of systems of alternating current.

2.- Use Maxwell equations in the interpretation of light as an electromagnetic wave.

3.- Use the characteristics of light in reflection, refraction, interference, diffraction and polarization.

- b. Explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course

- An ability to function on multidisciplinary teams

7. Brief list of topics to be covered

1.- Magnetism

2.- Electromagnetic waves

3.- Nature and propagation of light

4.- Geometric optics and wave optics

