

Biophysics

Academic Year: (2023 / 2024)

Review date: 01-02-2024

Department assigned to the subject: Physics Department

Coordinating teacher:

Type: Basic Core ECTS Credits : 6.0

Year : 1 Semester : 1

DESCRIPTION OF CONTENTS: PROGRAMME

1. Scientific method, critical attitude and importance of the representation of experimental data.
2. Living beings as thermodynamic systems.
3. Biophysics of cell membranes.
4. Biophysics of fluids: haemodynamics.
5. Biophysics of gases: respiration.
6. Wave biophysics: hearing
7. Physical basis of vision.
8. Physical principles of diagnostic imaging
9. Data representation and analysis.

LEARNING ACTIVITIES AND METHODOLOGY

Classroom lectures.
 Face-to-face classes: reduced (workshops, seminars, case studies).
 Student individual work.
 Laboratory session.
 Final exam.

Seminars and lectures supported by computer and audiovisual aids.
 Practical learning based on cases and problems, and exercise resolution.
 Individual and group or cooperative work with the option of oral or written presentation.
 Individual and group tutorials to resolve doubts and queries about the subject.
 Internships and directed laboratory activities.

ASSESSMENT SYSTEM

% end-of-term-examination:	60
% of continuous assessment (assignments, laboratory, practicals...):	40
Final exam.	
Continuous evaluation.	