

FACULTY OF MEDICINE
Dental Medicine Department

SYLLABUS OF THE SUBJECT
PHYSICS

Teacher of lectures and tutorials		OULD ABBAS -BENSAOULA Amaria
Grade	Professeur	
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Course description	
Type of teaching unit	Cours Magistral, TD
Hourly volume	3 h de cours 1h30 de TD/Groupe
educational goals	Medical physics is the study of physical phenomena related to medicine and biology. This discipline constitutes an interface between physics and medical sciences. The physical phenomena covered in this subject will make it possible to scientifically explain numerous processes that take place from the atomic, molecular, cellular, tissue scale, up to the organic scale.
Titles:	<ol style="list-style-type: none"> 1. States of matter 2. Liquids, gases, solutions 3. Changes of state 4. Colligative properties 5. Basic notions: force, energy, potential 6. Imposed potentials, electrophoresis 7. Electrostatics and electrokinetics 8. The field of optics 9. Nature and properties of light 10. The laws of propagation 11. Basics of Laser Radiation 12. Optical spectrometries 13. Particle radiation 14. X-rays and GAMMA 15. Basics of dosimetry and radiation protection 16. Particularities of dosimetry and radiation protection 17. Magnetostatic bases and electromagnetic waves 18. Alpha and Beta radiation 19. Sonic and ultrasonic technologies
Modulus coefficient	02
Calculation of the average	average = (EMD+TD)/2

EVALUATION OF KNOWLEDGE TESTS				
1st Test				
Period	Duration	Kind (1)	Scale	Evaluation criteria (2)
December	1h 30	QCM, QCS, croq,E	/20	S , R
2nd Test				
Period	Duration	Kind (1)	scale	évaluation criteria (2)
March	1h30	QCM, QCS,croq,E	/20	S, R

(1) Kind : E= écrit , QCM , QCS , Croq

(2) Evaluation criteria : A= Analyse, S= synthèse , R= Résultats .

(3)

EQUIPMENT AND MATERIALS USED	
Platforms	Data show, computer, blackboard, chalk...
Application names	Word, power point, pdf.....
Handouts	Handouts

EXPECTATIONS	
Expectations of students	Acquire basic physical knowledge and understand the relationship of the knowledge of this physics teaching with medical applications
Teacher expectations	Participation, involvement through preparation of presentations Modern medicine requires excellence; and, as is accepted throughout the world, there can be no excellence without an important place given to fundamental sciences in general and to physics in particular.

Bibliography	
Books and digital resources	Physics books of: electricity, light and geometric optics, radiation, radioactivity, spectrometry.....
Sites web	Google, wilképédia

Wet stamp of the department