



The University of Jordan
Accreditation & Quality Assurance Center

Course Syllabus

Course Name:

1	Course title	Electricity and Magnetism 2
2	Course number	342332
3	Credit hours (theory, practical)	3 hrs (Theory)
	Contact hours (theory, practical)	3 hrs (Theory / week)
4	Prerequisites/corequisites	342331, 302102
5	Program title	B. Sc. In physics
6	Program code	0302 3
7	Awarding institution	The University of Jordan
8	Faculty	Science
9	Department	Physics
10	Level of course	B. Sc.
11	Year of study and semester (s)	2016- 2017; First Semester
12	Final Qualification	B. Sc. In Physics
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English/ Arabic
15	Date of production/revision	December 15 2016

16. Course Coordinator:

Office numbers, office hours, phone numbers, and email addresses should be listed.

Office number : Ph 304
 Phone number : 0777659911 ext 22035
 Office Hrs : Sun, Tue, Thu , 10 - 11 am
 : Mon , Wed , 1-2 pm

Email Y. ramadin @ju. Edu. Jo.

17. Other instructors: None

Office numbers, office hours, phone numbers, and email addresses should be listed.

18. Course Description:

As stated in the approved study plan.

- 1 : Electrodynamics
- 2 : Conservation Laws
- 3 : Electromagnetic Waves
- 4 : Potentials and Fields
- 5: Radiation

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
1- Electromotive force , Electromagnetic Induction, Maxwells Eqns.	1, 2, 3, 4	Y . ramadin	94 %	Section 21 & 22	As in sec 25
2- Conservation Laws : The continuity Eqn. Poynting Theorem, Momentum	5, 6, 7	Y.ramadin	96 %	Section 21, 22	As in Sec. 25
Electro – magnetic Waves: Waves in one dimension, EM Waves in Vacuum, EM- Waves in Matter, Absorbation & Desperation, Guided Waves	8, 9, 10,11,12	Y.ramadin	94%	Section 21,22	As in Sec. 25
Potentials & Fields	13,14	Y. ramadin	92%	Sec. 21, 22	As in 25

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

- 1: Weekly Assignments : Home work Problems

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

- 1 – Two written Exams
- 2 – Problem Sheets
- 3 – Oral evaluation

23. Course Policies:

A- Attendance policies:

As stated in the university laws

B- Absences from exams and handing in assignments on time:

As stated in the university laws

C- Health and safety procedures:

As provided by the university

D- Honesty policy regarding cheating, plagiarism, misbehavior:

As stated by the university laws

E- Grading policy:

20 % First Exam

20 % Second Exam

10 % Home Works % attendance

50 % Final Exam

F- Available university services that support achievement in the course:

24. Required equipment:**25. References:**

A- Required book (s), assigned reading and audio-visuals:

Introduction to electrodynamics , third edition , By David J. Griffiths.

B- Recommended books, materials, and media:

- 1- M. Nayfeh & M. Bressel , Electromagnetism , First edition, John Wily
New York, 1985.
- 2- L. Grant & Phillips , Eletromagneism , Seond edition John Wily , New
York , 1990.
- 3- R. H. Good , Classical Electromagnetism, Saunders College Pupliching
1999.

26. Additional information:

Name of Course Coordinator: -Yahya Al- Ramadin-----Signature: ----- Date: -15 Dec

@016----- Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

Head of Department
Assistant Dean for Quality Assurance
Course File