Course Syllabus

Course ID	**0902503**
Course Title	**Optical communication**
Prerequisite	**0902409 Optical communication**
Time & Date	
Coordinator	
Instructor	**Assoc. Prof. Dr.** Head of Communication and electronics Department
Office hours	**Mon 8:30 – 11:30am & Tue 9:00-11:00 am**
Course Description	Laser generation. Semiconductors as optical sources. Modulation and applications. Optical fibers. Wave propagation in optical fibers. Fiber modes. Fiber components and
Course Objectives	1. Develop an overview of Optical fiber communication systems 2 To be familiar with various multiplexing/multiple access techniques 3-Understand principles of RF wave propagation 4-Develop an overview of wire-line and wirless telephone systems 3. Develop an overview of Microwave radio communications 5-Develop an overview of Satellite communications and multiple accessing
Course Outcomes	After successfully completing this course, the students should be able to: (a) An ability to apply knowledge of and (b) An ability to design and conduct experiments, to analyze and interpret data (c) An ability to design a system, component, or process to meet desired needs (d) An ability to function on multi-disciplinary teams program outcomes (e) An ability to identify, formulate, and solve engineering problems (f) An understanding of professional and ethical responsibility (g) An ability to communicate effectively (h) The broad education necessary to understand the impact

	of engineering solutions in a global and societal context (i) A recognition of the need for, and an ability to engage in life-long learning (j) A knowledge of contemporary issues (k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice
Course Topics	1-Optical communication 2-Multiplexing Techniques 3-Wire-line telephone concepts 4-RF wave propagation 5-Wireless telephone concepts 6-Microwave radio 7-communications 8-Satellite communications
Course Text Book	Understanding Optical communication By Harry Dutton, isbn 0130201413
Course References	1. Optical communication By Rao Mukunda, isbn 81710902 2. optical fibre communication By Gerd Keiser, isbn 0070334676 3 . Optical communication By Rave Kumar , isbn 813800415
Course delivery	Lectures Tutorial Lab Homework Project Computer Internet Industrial Visit

Course Assessment	Assignments & short reports…….. 10% 2 exams @ 20% each ……. 40% Final exam …….. 50%
Updated	Dr. Saad 27/9/2009

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO12
CO1											
CO2											
CO3											
CO4											
CO5											
CO6											
CO7											
CO8											
CO9											

	a	b	C	D	e	f	g	h	i	j	K
CO1											
CO2											
CO3											
CO4											
CO5											
CO6											
CO7											
CO8											
CO9											

ABET a-k Engineering and Technology program outcome

(a) An ability to apply knowledge of mathematics, science, and engineering
(b) An ability to design and conduct experiments, to analyze and interpret data
(c) An ability to design a system, component, or process to meet desired needs
(d) An ability to function on multi-disciplinary teams
(e) An ability to identify, formulate, and solve engineering problems
(f) An understanding of professional and ethical responsibility
(g) An ability to communicate effectively
(h) The broad education necessary to understand the impact of engineering solutions in a global and societal context
(i) A recognition of the need for, and an ability to engage in life-long learning
(j) A knowledge of contemporary issues
(k) An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Plagiarism

Deliberate plagiarism is a serious act of academic misconduct. Students may be suspended from the University if they are found to have plagiarized their course work. Whether inadvertent or deliberate, plagiarism includes the following:

(a) word-for-word copying of sentences or whole paragraphs or presenting of substantial extracts from either paper-based or electronic sources the work or data of others that are published or unpublished (such as books, internal reports, and lecture notes or tapes) without clearly indicating their origin;
(b) using very close paraphrasing of sentences or whole paragraphs without due acknowledgement in the form of reference to the original work;
(c) submitting another student's work in whole or in part;
(d) using of another person's ideas, work or research data without acknowledgement;
(e) copying computer files, algorithms or computer code without clearly indicating their origin;
(f) submitting work that has been written by someone else on the student's behalf; and
submitting work that has been derived, in whole or in part, from another student's work by a process of mechanical transformation (e.g., changing variable names in computer programs