

**ENGE 5424- Fiber Optics
Course Syllabus**

“Faced with the choice between changing one's mind and proving that there is no need to do so, almost everyone gets busy on the proof.” **Galbraith's Law**

Instructor	Dr. Hala J. El-Khozondar Office: E204 E-mail: hkhonzondar@iugaza.edu.ps
Course description	The course covers the following material: properties and propagation of light through optical fibers, how fiber works, types of fibers, point-to-point optics communication system, fiber applications in industry as well as in daily life.
Teaching assistant	Eng. Hanan Abu Thraya
Prerequisite	Communication 1
Textbook	Joseph C. Palais, Fiber Optic Communications, Fourth Edition, 1998.
Reference	1- P. Powers, An introduction to Fiber Optics Systems, 1993. 2- J. Hoss and E. Lacy, Fiber Optics, Second Edition, 1993.
Topics	Optics Review Lightwave Fundamentals Fiber Optic Communications Optical Fiber Waveguides Sources, Detectors and Connectors Fiber Optics System
Course Objectives	To understand the characteristics of light and how it propagates in different media. To know all types of Fiber To understand how light guided by fiber To design point-to-point optical communication system
Intended learning outcomes	Recite types of fiber Calculate numerical aperture and modes of fiber Built a point to point system using computer Write the applications of fiber
Computer Skills	Knowledge of Excel

Assessment	Midterm Exam (25%) Assignments & Quizzes (15%) Laboratory (20%) Final Exam (40%)
Homework Policy	Homework assignments will be given in a regular basis. Each assignment is to be returned within one week. <i>No delay will be accepted except with good excuse.</i>
Office Hours	As posted on the office door, or by appointment.