Global Learning Semesters
Course Syllabus
Course: COMP-358 Networks and Data Communications
Department: Computer Science
Host Institution: University of Nicosia, Nicosia, Cyprus

Course Summary		
Course Code	**Course Title**	**Recommended Credit Hours**
COMP-358	Networks and Data Communications	3
Semester Offered	**Contact Hours**	**Prerequisites**
Spring	42	CENG-200, MATH-191, COMP-151. General knowledge of computer systems and programming, and elementary calculus.
Department	**Level of Course**	**Language of Instruction**
Computer Science	Upper Division	English

Course Description

This course develops the fundamental concepts of network architecture, proceeding from the physical layer to the network layer. More specifically the course covers the following topics: network services and layered architectures, data communication fundamentals (analog and digital), transmission media, data-Link layer control and protocols, medium access control protocols, network layer switching and routing (emphasis on IP), internetworking protocols, routing algorithms and protocols. The course also briefly introduces students to transport layer services (TCP, UDP) and the networked applications supported by them.

Instructor

Dr. Charalambos Christou

Course Aims and Objectives

To introduce students to fundamental data communications and network architecture concepts and to their application in emerging communication networks.

Teaching Methods

The course is delivered through a mixture of lectures and practical exercises and assignments.

Course Teaching Hours

42 hours lectures/presentations. The course is delivered during the Spring semester in 14-weeks (3 hours/week).

Evaluation and Grading

Homework: 20%
Test(s): 30%

Final Exam: 50%

Readings and Resources

Required Textbook
Leon-Garcia and Widjaja, Communication Networks, McGraw Hill 2000, (ISBN: 0070228396).

Recommended Reading
Tanenbanum A., Computer Networks, 4th Ed. 2003, Prentice Hall PTR, (ISBN: 0130661023).
Larry L. Peterson and Bruce S. Davie, Computer Networks: A Systems Approach, Second Edition, Morgan Kaufman, ISBN 1-55860-514-2, 1999.
Halsall, Data Communications, Computer Networks and Open Systems, 1995, Addison-Wesley, (ISBN: 020142293X)