SYLLABUS

I. <u>Title</u>: CSC374 Computer Networking & Security

II. <u>Time and Place</u>: Fall 2013,
   MWF 8:30-9:35 a.m. RS211;
   Final Examination: Monday, Dec. 16 from 7:30-10:00 a.m.

III. <u>Credit</u>: Four credit hours for 3 class sessions per week

IV. <u>Instructor</u>: Jeff McKinstry, Ph.D., Professor of Computer Science

V. <u>Office Hours</u>: (Rohr Science 216, 849-2269; email: jeffmckinstry@pointloma.edu)
Monday	1:05 – 2:45 p.m.
Tuesday	8:30 – 10:50 a.m.
Wednesday	1:05 – 2:45 p.m.
Thursday	9:30 – 10:50 a.m.
Friday	1:05 – 2:45 p.m.

   or any other time you can find me in my office.

VI. <u>Required Texts</u>:
   Peterson, L.L. and Davie, B.S. <u>Computer Networks: a systems approach</u>. 5th Edition, Morgan Kaufmann, San Diego, 2012.

VII. <u>Objectives of the course</u>:

   The catalog describes the course as follows:
   "This course provides an introduction to modern computer network technologies. Students gain an understanding of networking fundamentals including layering and the OSI model, protocols, standards, and network services. LANS, MANS, WANS, Internet and wireless networks are covered. While theory is the focus of the class, some hands-on activities are included."

   This course is similar to Operating Systems in that the emphasis is on teaching how things work "under the hood". A secondary emphasis of the course will be learning low-level network programming using the sockets API. A small amount of network administration will be covered.

   Topics:
   > Foundations (chapter 1)
   > Network level (chapter 2)
   > Internetworking (chapter 3)
   > End-to-end protocols (UDP, TCP, RPC) (chapter 5)
   > Congestion control and resource allocation (chapter 6)
   > Network security (chapter 8, guest speaker)
   > Applications (student presentations from chapter 9)

VIII. <u>Learning outcomes</u>:
   Students will understand the interaction between hardware and software.

IX. <u>Course Organization</u>: The Course Schedule provides an outline with dates for some of the important activities of the course. Class time will be used for:

   1. Introduction of material in the text to be assigned.
   2. Discussion of assigned material in the text.

3.   Discussion of student questions on the test or class material, including exercises attempted.
4.   Administering tests.
5.   Laboratory type projects

X.   Attendance: See the College Catalogue for a complete statement.

XI.   Student Evaluation:

Programming Projects/Lab projects	20%
Homework/in-class assignments	20%
2 Midterm exams	30%
Class presentation	10%
Final Exam	20%

Late assignments will be worth 70% if turned in after the class period in which they are due. Late assignments will not be accepted more than 1 week late.

You will be required to **demonstrate** computer programs written for the lab assignments to the professor and to turn in a printout of your work. As usual, style and documentation will be judged as well as correctness.

Grades will be determined as follows:

93-100%	A
90-92%	A-
87-89%	B+
83-86%	B
80-82%	B-
77-79%	C+
73-76%	C
70-72%	C-
67-69%	D+
63-66%	D
60-62%	D-
0-59%	F