

Hagerstown Community College
OFFICIAL MASTER SYLLABUS DOCUMENT

COURSE: IST 253 TCP/IP 3 credits

INSTRUCTOR:

SEMESTER/YEAR: Fall 2016

COURSE DESCRIPTION: TCP/IP (Transmission Control Protocol/Internet Protocol) defines the broad family of protocols and services that make the Internet possible. The course covers models, protocols, services and standards that govern TCP/IP and that guide its behavior on modern networks. Real world and interactive examples are offered in addition to hands-on projects to reinforce key concepts and to demonstrate the use of monitoring and managing TCP/IP in its native environment.

TEXTBOOK: Guide to TCP/IP, Tittel, Pyles, Carrell, 5th Ed; Course Technology, ©2016, ISBN-10 1-305-94695-2.

STUDENT LEARNING OUTCOMES: The goal of this course in conjunction with IST 154 is to provide a continuation of study in networking technologies and prepare students to pass CompTIA's vendor-independent networking certification exam, Network +. This course includes, but is not limited to an analysis of the various protocols within the main TCP/IP family of protocols: ARP, RARP, DNS, TCP, IP, DHCP and subnetting, subnet masks managing local area networks, wide area networks, wireless networks, optical networking, network security, network servers, and enterprise networks.

TOTAL HOURS OF COURSEWORK:

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute “academic” hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of course work per credit. For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework.

Hours Required	Topic
30	Reading of textbook (12 Chapters)
30	Chapter Quizzes and HOPS
10	Protocol Reports (10)
15	Mid-term Exam & Prep
15	Final Exam & Prep
20	Paper