

**450 ELECTRONIC PUBLISHING II** (CSU) 3 UNITS  
Prerequisite: None | Lecture 2 hrs, Lab 2 hrs  
A beginning course where students will create WEB pages, set up personal or commercial WEB sites, upload to a WEB server that the class creates and use HTML as a foundation to Javascript, Dreamweaver, FLASH, AJAX and other commercial packages.

**452 PROGRAMMING IN JAVA** (UC-CSU) 3 UNITS  
Prerequisite: CoSci 407  
Lecture 2 hrs, Lab 2 hrs  
Covers Java language and object-oriented programming paradigm. Topics include Java expressions, control structures, methods, Java classes, overloading, object references, inheritance, polymorphism, Java library packages, exception handling, file I/O, applets, GUI, and event handling. Introduces to data structures such as stacks, queues, and trees.

**453 A+ CERTIFICATION PREPARATION** 3 UNITS  
Prerequisite: None | Lecture 2 hrs, Lab 2 hrs  
Provides student with the workable knowledge needed for the installation, setup, troubleshooting and optimization of hardware and software related to personal computer systems and peripheral devices. This course will cover information needed to prepare for the current A+ certification test and the CISCO IT certification test.

**483 PRINCIPLES OF INFORMATION SECURITY** (CSU) 3 UNITS  
Prerequisite: CoSci 401 | Lecture 2 hrs, Lab 2 hrs  
The principles of information security including new innovations in technology and methodologies. Course includes the historical overview of information security, risk management and security technology (Firewalls and VPNs), current certification information, legal, ethical, and professional issues. Cryptography, physical security, and implementing information security will be covered. Lab exercises allow the students to apply the basics in a hands-on environment.

**484 NETWORK SECURITY** (CSU) 3 UNITS  
Prerequisite: CoSci 487 | Lecture 2 hrs, Lab 2 hrs  
Examines the theory of the primary network security threats and the practical application of tools to mitigate those threats. Threats covered will include reconnaissance, access, and denial of services attacks, along with virus, worm and Trojan horse projections. Hardware and software based network protection, including firewalls, access control lists, intrusion detection systems, and cryptography will also be explored along with Virtual Private Networking. This course maps to the commercial Cisco CCNA Security certification.

**487 INTRODUCTION TO LOCAL AREA NETWORKS** (CSU) 3 UNITS  
Advisory: CoSci 453 | Lecture 2 hrs, Lab 2 hrs  
Provides a solid foundation in computer networking technology. It covers network cables, connectors & devices, network topologies & architecture, wired and wireless networking protocols & standards, OSI model, TCP/IP, IP addressing, subnets, wide area networks, network security & troubleshooting and client/server operating systems survey.

**488 SECURITY+ CERTIFICATION PREPARATION** (CSU) 3 UNITS  
Prerequisite: CoSci 487 | Lecture 2 hrs, Lab 2 hrs  
Students learn concepts of computer and network-security and gain skills necessary to apply knowledge of security concepts, tools, and procedures to react to security incidents, and guard against the security risks. At the end of the course students are prepared for the CompTIA Security+ certification exam.

**185 DIRECTED STUDY** (CSU) 1 UNIT  
Provides opportunity for in-depth study of a chosen area of Computer Science Information Technology on a contract basis, under the direction of a supervising instructor. Credit limit: Maximum of 3 units may be taken for credit.

**285 DIRECTED STUDY** (CSU) 2 UNITS  
Provides opportunity for in-depth study of a chosen area of Computer Science Information Technology on a contract basis, under the direction of a supervising instructor. Credit limit: Maximum of 3 units may be taken for credit.

**385 DIRECTED STUDY** (CSU) 3 UNITS  
Provides opportunity for in-depth study of a chosen area of Computer Science Information Technology on a contract basis, under the direction of a supervising instructor. Credit limit: Maximum of 3 units may be taken for credit.

**COUNSELING**  
*COUNSELING (formerly Personal Development)*  
FACULTY: Michong Park, Chair  
Sherrie Loper, Vice Chair | Diana Bonilla  
Aleida Gomez | Christine Kourinian | Afri Walker  
Tashini Walker | Linda Marie Avalos (EOPS)  
Jose Luis Ramirez (EOPS) | Robert Schwartz (DSPS)  
Adam Serda (DSPS)

**4 CAREER PLANNING** (CSU) 1 UNIT  
Prerequisite: None | Lecture 1 hr  
*NOTE: Class is graded pass/no-pass*  
Designed to assist students in choosing a major or vocational choice. Students will explore their interests, skills, and values through the use of career and vocational assessments. Students will access information regarding occupational characteristics, employment trends and labor market updates.

**17 COLLEGE SURVIVAL SKILLS DEVELOPMENT** (CSU) 1 UNIT  
Prerequisite: None | Lecture 1 hr  
*NOTE: Class is graded pass/no-pass*  
Examines a variety of academic survival skills including familiarization with college support services, time management, memory, reading, note-taking, testing techniques, and stress reduction. Included will be identifying different learning, educational, and decision making styles.