Courses in Computer Science

I Csi 107
Web Programming (3)
This course offered online through the Blackboard Learning System. This course is designed to introduce students to the ever changing world of Web Programming. Students will develop the ability to write original code in HTML, XML, CSS, Javascript, etc. to create highly customized websites.
(2476) Kolta, Michael
4 Week 2: June 20-July 15
*Online course in Blackboard*

I Csi 124X
Computer Security Basics (3)
This course offered online through the Blackboard Learning System. An introduction to security in computers and networks for a general audience. The operation of computers and networks is explained to show how they are the basis for attacks. The course will confer a basic but comprehensive understanding of how computer and network attacks (e.g., viruses, worms, denial of service) work. Also, how general users of computers can defend themselves from current and future attacks.
(2372) MacDonald, Ian
4 Week 1: May 23-June 17
*Online course in Blackboard*

I Csi 201
Introduction to Computer Science (4)
Computer algorithms and their representation. The principle of information hiding and its relation to program block structure. File structure and access methods. The efficient use of computational resources. Program development and style.
Students registering for this course must first register for the required Lab (1214).
(1213) Ravishankar, Veena
6 Week 1: May 23-July 1
MTTh 6:00p.m.-9:15p.m.
HU-111

Lab for I Csi 201
(1214) Lee, Jooyeon
6 Week 1: May 23-July 1
TW 4:00p.m.-5:45p.m.
HU-25

I Csi 210
Discrete Structures (4)
Proofs by induction; mathematical reasoning, propositions, predicates and quantifiers; sets; relations, graphs, and trees; functions; counting, permutations and combinations. Prerequisite(s) or corequisite: I Csi 201.
(1222) Hono, Daniel
6 Week 1: May 23-July 1
MTWThF 10:00a.m.-11:45a.m.
BB-362

I Csi 300Z
Social Security, and Privacy Implications of Computing (3)
The ethical and moral implications of using computers to affect the lives of individual and collective members of human society. Material drawn from a variety of topics, including security and privacy in computers, networks, security measures, and human users, data banks vs. rights to privacy, intellectual property, open vs. closed software, software piracy, unauthorized access, and other computer crimes. Prerequisite(s): I Csi 101, I Csi 110, I Csi 201 or other hands-on course in programming.

(1260) Wu, Zeyang
4 Week 3: July 18-August 12
MTWThF 12:30p.m.-2:50p.m.
BB-362

I Csi 310
Data Structures (3)
Commonly used abstract data structures and their implementation. The use of pointers and recursive programming. Stacks, queues, lists and trees, and their application to such problems as sorting and searching. Analysis of algorithms for using these structures. Prerequisite(s): I Csi 201.

Students registering for this course must first register for the required lab (1298).

(1297) Xie, Jingnan
6 Week 3: July 5-August 12
MTWThF 12:30p.m.-1:50p.m.
BB-213

Lab for I Csi 310
(1298) Gorovits, Alexander
6 Week 3: July 5-August 12
Th 2:00p.m.-3:20p.m.
HU-25

I Csi 405
Object Oriented Programming Using JAVA (3)
This course will concentrate on teaching the student Object Oriented Programming using the Java language. Topics will include OO principles, such as polymorphism and abstraction, and how they are realized in Java (Classes, Interfaces, Inheritance). The course will also cover some of the core Java APIs, Java I/O, Threads, Networking, and Exceptions. Throughout the course basic Design Patterns as they apply to the core Java API will be discussed. Students will be required to take exams as well as apply the techniques learned in class on a design project with other classmates. These designs will be presented to the class for review and discussion.

This is a fast-paced course and not a beginning course on Java. The instructor will provide only a brief review of Java basics (perhaps two or three lectures) before proceeding with the more advanced material. Prior knowledge of Java is highly desirable.

Students registering for this course must have taken I Csi 310.

(1682) Cortese, Andrew
4 Week 2: June 20-July 15
MTWThF 12:30p.m.-2:50p.m.
HU-19

I Csi 422
Introduction to Computer Graphics (3)
Mathematics, data structures, algorithms, system architecture and programming projects for implementing two and three dimensional computer graphics software. Rasterization, matrices, linear and projective transformations; clipping, removal of hidden lines and surfaces. Devices, event driven user interaction, and an introduction to window systems and visual programming tools. Prerequisite(s): A Mat 220 (linear algebra) and I Csi 310, or permission of the instructor.

(2545) Yang, Yueming
4 Week 3: July 18-August 12
MTWThF 2:00p.m.-3:20p.m.
HU-112