

Course Schedule - Summer 2005

Computer Science

101 **Intro to Computing, Eng & Sci** Credit: 3 hours.

(C S 101) Fundamental principles, concepts, and methods of computing, with emphasis on applications in the physical sciences and engineering. Basic problem solving and programming techniques; fundamental algorithms and data structures; use of computers in solving engineering and scientific problems. Credit is not given for both CS 101 and either CS 105 or CS 110 section C. Prerequisite: MATH 220.

This course satisfies the General Education Criteria for a Quant Reasoning II course.

Students must register for one lab-discussion and one lecture section. Engineering students must obtain a dean's approval to drop this course after the second week of instruction.

CRN	Type	Section	Time	Days	Location	Instructor
30757	lecture	AL1	02:30 PM - 03:45 PM	MTW	room 1109 Siebel Center for Comp Sci	Gambill, T
30757: Quant Reasoning I course.Meets 13-Jun-05 - 04-Aug-05.						
30758	laboratory-discussion	AY1	10:00 AM - 11:50 AM	TR	room L520 Digital Computer Laboratory	Gambill, T
30758: Quant Reasoning I course.Meets 13-Jun-05 - 04-Aug-05.						
30759	laboratory-discussion	AY2	10:00 AM - 11:50 AM	MW	room L520 Digital Computer Laboratory	Gambill, T
30759: Quant Reasoning I course.Meets 13-Jun-05 - 04-Aug-05.						

125 **Intro to Computer Science** Credit: 4 hours.

(C S 125) First course for computer science majors and other students with a deep interest in computing. The course introduces students to basic concepts in computing and fundamental techniques for solving computational problems Prerequisite: Three years of high school mathematics or MATH 012.

This course satisfies the General Education Criteria for a Quant Reasoning I course.

Students must register for one lab-discussion and one lecture section. Engineering students must obtain a dean's approval to drop this course after the second week of instruction.

CRN	Type	Section	Time	Days	Location	Instructor
30762	laboratory	AB1	09:00 AM - 10:50 AM	TR	room 1103 Siebel Center for Comp Sci	Zych, J; Parr, D
30762: Quant Reasoning I course.Meets 13-Jun-05 - 04-Aug-05.						
30763	laboratory	AB2	11:00 AM - 12:50 PM	TR	room 1103 Siebel Center for Comp Sci	Zych, J; Parr, D
30763: Quant Reasoning I course.Meets 13-Jun-05 - 04-Aug-05.						

30760	lecture	AL1	01:00 PM - 02:50 PM	MTW	room 1404 Siebel Center for Comp Sci	Zych, J
30760: Quant Reasoning I course.Meets 13-Jun-05 - 04-Aug-05.						

196 Freshman Honors Course in CS Credit: 1 hours.

(C S 196) Course is offered for honors credit in conjunction with other 100-level computer science courses, in which concurrent registration is required. Enrollment is strictly limited to beginning students with superior talents in computer science. A special examination may be required for admission to this course. May be repeated. Prerequisite: Concurrent registration in another 100-level computer science course (see Schedule); or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
30766	lecture-discussion	1	ARRANGED			Gambill, T
30766: Meets 13-Jun-05 - 04-Aug-05.						
30768	lecture-discussion	25	ARRANGED			Zych, J
30768: Meets 13-Jun-05 - 04-Aug-05.						

225 Data Structure & Softw Prin Credit: 4 hours.

(C S 225) Data abstractions: elementary data structures: lists, stacks, queues, trees; searching and sorting techniques. Introduction to the principles of software engineering including term programming project. Prerequisite: CS 125 or both CS 110 and junior standing; CS 173 or MATH 213; or consent of instructor.

This course satisfies the General Education Criteria for a Quant Reasoning II course.

Students must register for one lecture-discussion and one lecture section.

CRN	Type	Section	Time	Days	Location	Instructor
30770	lecture	AL1	03:00 PM - 04:50 PM	MTW	room 1404 Siebel Center for Comp Sci	Zych, J
30770: Meets 13-Jun-05 - 04-Aug-05.						
30772	laboratory-discussion	AY1	09:00 AM - 10:50 AM	TR	room 1111 Siebel Center for Comp Sci	Zych, J; Ivan, A
30772: Meets 13-Jun-05 - 04-Aug-05.						
30774	laboratory-discussion	AY2	11:00 AM - 12:50 PM	TR	room 1111 Siebel Center for Comp Sci	Zych, J; Ivan, A
30774: Meets 13-Jun-05 - 04-Aug-05.						

231 Computer Architecture I Credit: 3 hours.

(C S 231) Introduction to computer architecture, working up from the logic gate level: combinational and sequential networks; computer arithmetic; arithmetic/logic units; memory organization; control unit design. Credit is not given for both CS 231 and ECE 290. Prerequisite: CS 125.

This course satisfies the General Education Criteria for a Quant Reasoning II course.

CRN	Type	Section	Time	Days	Location	Instructor
30776	lecture	E	10:30 AM - 11:45 AM	MTW	room 1109 Siebel Center for Comp Sci	Carlyle, J
30776: Quant Reasoning II course.Meets 13-Jun-05 - 04-Aug-05.						

273 Intro to Theory of Computation Credit: 3 hours.

Finite automata and regular languages; pushdown automata and context-free languages; Turing machines and recursively enumerable sets; computability and the halting problem; undecidable problems; computational complexity and NP-completeness. Prerequisite: CS 125 and either CS 173 or MATH 213.

This course satisfies the General Education Criteria for a Quant Reasoning II course.

CRN	Type	Section	Time	Days	Location	Instructor
30778	lecture-discussion	B	09:00 AM - 10:15 AM	MTWR	room 1109 Siebel Center for Comp Sci	Bunde, D
30778: Quant Reasoning II course.Meets 13-Jun-05 - 04-Aug-05.						

296 Honors Course in CS Credit: 1 hours.

(C S 296) Group projects for honors work in computer science. Sections of this course are offered in conjunction with other 200-level computer science courses, in which concurrent registration is required. A special examination may be required for admission to this course. May be repeated. Prerequisite: Concurrent registration in another 200-level computer science course (see Schedule); or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
30779	lecture-discussion	25	ARRANGED			Zych, J
30779: Meets 13-Jun-05 - 04-Aug-05.						
30781	lecture-discussion	31	ARRANGED			Carlyle, J
30781: Meets 13-Jun-05 - 04-Aug-05.						
30783	lecture-discussion	73	ARRANGED			Bunde, D
30783: Meets 13-Jun-05 - 04-Aug-05.						

450 Intro to Numerical Analysis Credit: 3 or 4 hours.

(C S 350) Introduction to numerical analysis, including linear system solvers, optimization techniques, interpolation and approximation of functions, solving systems of nonlinear equations, eigenvalue problems, least squares, and quadrature; numerical handling of ordinary and partial differential equations. Same as CSE 401, ECE 491, and MATH 450. 3 undergraduate hours. 3 or 4 graduate hours. Prerequisite: CS 101 or CS 125; CS 257 or MATH 415; one of MATH 385, MATH 386, MATH 441; or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
31363	lecture-discussion	B3	10:00 AM - 11:15 AM	MTWR	room 1302 Siebel Center for Comp Sci	Vanderzee, H
31363: Meets 13-Jun-05 - 04-Aug-05.						
31363: 3 hours						
31364	lecture-discussion	B4	10:00 AM - 11:15 AM	MTWR	room 1302 Siebel Center for Comp Sci	Vanderzee, H
31364: Meets 13-Jun-05 - 04-Aug-05.						
31364: 4 hours						

498 Special Topics in CS Credit: 0 to 4 hours.

(C S 397) Lectures in topics of current interest. See Schedule for current topics. May be repeated. Prerequisite: As specified for each topic offering, see Schedule or departmental course description.

CRN	Type	Section	Time	Days	Location	Instructor
31261	laboratory	JF	01:00 PM - 04:50 PM	TWR	room 1103 Siebel Center for Comp Sci	Campbell, R; Fineberg, J; Hamilton, K
31261: Meets 13-Jun-05 - 04-Aug-05.						
31261: 3 hours Topic: Kabakov Albums						
31262	laboratory	JF4	01:00 PM - 04:50 PM	TWR	room 1103 Siebel Center for Comp Sci	Campbell, R; Fineberg, J; Hamilton, K
31262: Meets 13-Jun-05 - 04-Aug-05.						
31262: 4 hours Topic: Kabakov Albums						
32472	laboratory	PS	ARRANGED			Woodley, M
32472: Meets 13-Jun-05 - 04-Aug-05.						
	lecture	PS	11:00 AM - 11:50 AM	MF	room 1103 Siebel Center for Comp Sci	Woodley, M
: Meets 13-Jun-05 - 04-Aug-05.						

: 3 hoursTopic: Programming Studio. Credit: 3 Undergraduate hours. Discussion groups will be created after the beginning of the semester.