SPIRE REGISTRATION INFORMATION for 2023 Spring

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS _INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT._
CICS 109 INTRO TO DATA ANALYSIS IN R _Jasper McChesney_		UNDERGRADUATE NON-COMPSCI MAJORS ONLY.	PREVIOUSLY CICS 197R. COURSE RUNS ALL SEMESTER. CS MAJORS AND OTHER STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
CICS 110 FOUNDATIONS OF PROGRAMMING _Eduardo Calle Ortiz, Jakob Falus, Allison Poh, Cole Reilly, Jared Yeager_	COMPLETION OF THE R1 GEN ED (OR A SCORE OF 20 OR HIGHER ON THE MATH PLACEMENT TEST PART A), OR ONE OF THE FOLLOWING COURSES: MATH 101&102 OR MATH 104 OR MATH 127 OR MATH 128 OR MATH 131 OR MATH 132.	FRESHMEN AND SOPHOMORE STUDENTS ONLY.	PREVIOUSLY INFO 190S. STUDENTS ARE NOT PERMITTED TO TAKE CICS 110 AFTER SUCCESSFULLY COMPLETING COMPSCI 121 OR INFO 190S. CICS MAJORS WITH PRIOR PROGRAMMING EXPERIENCE AND A MATH PLACEMENT SCORE BELOW 20 MAY STILL ENROLL IN THIS COURSE WITH CICS ADVISOR APPROVAL. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
CICS 160 OBJECT-ORIENTED PROGRAMMING _Jaime Davila_	CICS 110 (OR INFO 190S) OR COMPSCI 121 WITH A GRADE OF C OR BETTER.	UNDERGRADUATE STUDENTS ONLY.	PREVIOUSLY INFO 190T. STUDENTS ARE NOT PERMITTED TO TAKE CICS 160 AFTER SUCCESSFULLY COMPLETING COMPSCI 160 OR INFO 190T. USE OF PERSONAL LAPTOP IN CLASS IS REQUIRED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
CICS 210 DATA STRUCTURES _Marc Liberatore_	CICS 160 (PREVIOUSLY INFO 190T) WITH A GRADE OF C OR BETTER.	UNDERGRADUATES ONLY.	STUDENTS ARE NOT PERMITTED TO TAKE CICS 210 AFTER SUCCESSFULLY COMPLETING COMPSCI 187. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
CICS 256 MAKE: PHYSICAL COMPUTING _Donghyun Kim, Md Farhan Tasnim Oshim_	**_COMPSCI 187 WITH A GRADE OF 'C' OR BETTER AND BASIC MATH SKILLS (R1)._**	FRESHMEN, SOPHOMORE, AND JUNIOR BS-CS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. THIS COURSE HAS A REQUIRED LAB SECTION AND COUNTS TOWARD THE CS LAB SCIENCE REQUIREMENT FOR THE BS-CS. THIS OFFERING IS OPEN TO SOPHOMORE AND FRESHMAN BS-CS MAJORS ONLY. JUNIORS MAY BE CONSIDERED IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
CICS 290P INTRO TO PUBLIC INTEREST TECH _Francine Berman_		UNDERGRADUATES ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
CICS 291T S-CICS TRANSFER SUCCESS _Emma Anderson_			DEPARTMENT CONSENT REQUIRED: OPEN TO INCOMING CS AND INFORM TRANSFER STUDENTS ONLY.
CICS 298A P-LEADRSHP:COMMUNCTNG-EXPRTISE _Emma Anderson_	COMPSCI 186 (OR COMPSCI 187 OR INFO 190T/CICS 160) WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE, AND JUNIORS CS OR INFORM MAJORS ONLY.	SENIORS AND STUDENTS IN OTHER MAJORS MAY BE CONSIDERED IF AVAILABLE SEATS. STUDENTS FROM OTHER MAJORS MAY BENEFIT FROM THIS COURSE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

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CICS 305 SOC ISS IN CMPTNG *Erin Butler, Oscar Garcia, Elizabeth Gunther, Siobhan Meï, Justin Obara, Christina Sutcliffe, Michelle Trim*	CS MAJORS: ENGLWRIT 112 WITH A GRADE OF C OR BETTER (OR ENGLISH WRITING WAIVER) AND COMPSCI 220, COMPSCI 230 AND EITHER COMPSCI 240 OR COMPSCI 250. INFORM MAJORS: ENGLWRIT 112 WITH A GRADE OF C OR BETTER (OR ENGLISH WRITING WAIVER) AND INFO 248.	ODD LECTS: SENIOR AND JUNIOR CS MAJORS ONLY. RESTRICTED TO CS PRIMARY MAJORS. EVEN LECTS: SENIOR AND JUNIOR INFORMATICS MAJORS ONLY. RESTRICTED TO INFORMATICS PRIMARY MAJORS.	Due to high demand for graduating seniors, capacity has been set to zero temporarily while graduating seniors are pre-enrolled. SATISFIES JUNIOR YEAR WRITING REQUIREMENT. ODD LECTURES FOR CS MAJORS; EVEN LECTURES FOR INFORM MAJORS. ELIGIBILITY LIMITED TO CS OR INFORMATICS PRIMARY MAJORS ONLY. CS OR INFORMATICS SECONDARY MAJOR MUST TAKE JUNIOR YEAR WRITING COURSE WITHIN PRIMARY MAJOR DEPARTMENT. LECT 01-02 MEET TOGETHER; LECT 03-04... LECT 13-14, ETC. SPIRE WILL ONLY RECOGNIZE THE ENGLWRIT112 PREREQUISITE WHEN TAKEN AT UMASS AMHERST. JUNIOR AND SENIOR CS AND INFORM MAJORS WITH AP CREDIT, TRANSFER CREDIT, OR A WAIVER FOR ENGLWRIT112 WHO MEET THE OTHER STATED PREREQUISITES WILL NEED ASSISTANCE TO ENROLL VIA THE OVERRIDE FORM FOR CICS 305: https://www.cics.umass.edu/overrides.
CICS 396A IS-DIRECTED RESEARCH GROUP *Neena Thota*			STUDENTS MUST BE ENROLLED IN THE ERSP PROGRAM AND SUCCESSFULLY COMPLETED CICS 290A INTRODUCTION TO RESEARCH IN THE DISCIPLINE IN THE FALL. THEY ARE THEN ENROLLED IN THIS COURSE IN THE SPRING OF THE SECOND YEAR. CS AND INFORM MAJORS MAY PETITION TO COUNT AS A MAJOR ELECTIVE. UPD APPROVAL REQUIRED, SUBJECT TO PROGRAM RULES THAT APPLY TO INDEPENDENT STUDY COURSES.
CICS 398T P-CPT		CS MAJORS ONLY.	INTERNATIONAL UNDERGRADUATE STUDENTS SHOULD REFER TO THE IPO WEBSITE FOR DETAILS ABOUT CURRICULAR PRACTICAL TRAINING (CPT). DETAILS ABOUT REGISTRATION AND THE CPT APPLICATION PROCESS FOR CS MAJORS: https://www.cics.umass.edu/careers/articles/cpt-process-internships
CICS 598T P-CPT		GRADUATE CMPSCI STUDENTS ONLY.	COMPUTER SCIENCE GRADUATE STUDENTS INTERESTED IN PURSUING CPT MUST SUBMIT A HANDSHAKE APPLICATION FOUND ON THE CICS CAREERS WEB PAGE. STAFF WILL ENROLL GRADUATE STUDENTS IN FALL/SPRING IN THE UNIV SECTION AND IN WINTER/SPRING IN THE UWW SECTION. DETAILS ABOUT REGISTRATION AND THE CPT APPLICATION PROCESS FOR CMPSCI GRADUATE STUDENTS: https://www.cics.umass.edu/career-development/guidelines-international-students
COMPSCI 119 INTRO PROGRAMMING *Cole Reilly*		UNDERGRADUATE NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER SOPHOMORE AND FRESHMEN REGISTER, 119 WILL OPEN TO JUNIORS. NON-CS JUNIORS SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO THE WAITLIST AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 187 PROGRAMMING W/DATA STRCTRS *Meng-Chieh Chiu*	COMPSCI 121 WITH A GRADE OF B OR BETTER (OR COMPSCI 186 (OR COMPSCI 190D) WITH A GRADE OF C OR BETTER).	UNDERGRADUATES ONLY.	REQUIRED PREREQUISITE: GRADE OF B OR BETTER IN COMPSCI 121 (OR C OR BETTER IN COMPSCI 186). ALL STUDENTS WITH AP OR TRANSFER CREDIT FOR 121 WILL REQUIRE AN OVERRIDE TO ENROLL. AFTER CS MAJORS AND CICS-ET MAJORS REGISTER, 187 WILL OPEN TO ALL UNDERGRADUATES WHO MEET PREREQUISITE. NON-CS MAJORS WITH THE REQUIRED PREREQUISITE TAKEN AT UMASS SHOULD NOT REQUEST AN OVERRIDE AND WAIT FOR THE MAJOR RESTRICTION TO BE REMOVED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 198C P-INTRO-C PROGRAMMING LANGUAGE *Meng-Chieh Chiu, J Moss, Timothy Richards*	COMPSCI 121 WITH A GRADE OF B OR BETTER (OR COMPSCI 186 OR CICS 160/INFO 190T WITH A GRADE OF C OR BETTER).	FRESHMEN, SOPHOMORES, AND JUNIORS ONLY.	IT IS RECOMMENDED THAT STUDENTS TAKE COMPSCI 198C BEFORE TAKING COMPSCI 230. INITIAL ELIGIBILITY IS LIMITED TO FRESHMEN, SOPHOMORE AND JUNIOR CS MAJORS. PROGRAM WILL CONSIDER OPENING REGISTRATION BASED ON DEMAND. STUDENTS NOT ELIGIBLE SHOULD WAIT UNTIL THE MAJOR RESTRICTION IS REMOVED AND ENROLL ON SPIRE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 220 PGMG METHODOLOGY *Marius Minea*	COMPSCI 187 WITH A GRADE OF 'C' OR BETTER.	CS MAJORS ONLY.	CS MINORS, APPLICANTS, AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

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COMPSCI 230 CMPTR SYS PRINC *Meng-Chieh Chiu*	*COMPSCI 187 WITH A GRADE OF 'C' OR BETTER.*	CS MAJORS ONLY.	IT IS RECOMMENDED THAT STUDENTS TAKE COMPSCI 198C BEFORE TAKING COMPSCI 230. CS MINORS, CS APPLICANTS, AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 240 RSNG UNDER UNCERTAINTY *Shiting Lan, Sunghoon Lee*	COMPSCI 187 (OR INFO 190T/CICS 160) AND MATH 132 BOTH WITH A GRADE OF C OR BETTER.	CS MAJORS ONLY.	CS MINORS, CS APPLICANTS, AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 250 INTRO TO COMPUTATION *David Barrington, Ghazaleh Parvini*	COMPSCI 187 (OR ECE 241 OR INFO 190T/CICS 160) AND MATH 132, BOTH WITH A GRADE OF C OR BETTER.	LECT 01: CS, CSENG, AND MATH MAJORS ONLY. LECT 02: CS, CSENG, AND MATH MAJORS ONLY.	CS MINORS, CS APPLICANTS AND OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 311 INTRO TO ALGORITHMS *Marius Minea, Ghazaleh Parvini*	*COMPSCI 187 AND COMPSCI 250 (OR MATH 455) WITH A GRADE OF C OR BETTER.*	SOPHOMORE, JUNIOR, AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 320 INTRO TO SOFTWARE ENGINEERING *Gordon Anderson, Heather Conboy, Jaime Davila, Matthew Rattigan*	COMPSCI 220 WITH GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. SATISFIES INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS MAJORS. MEETS WITH COMPSCI 429. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 325 INTRO TO HUMAN CMPTR INTERACTN *Cheryl Swanier*	*COMPSCI 186 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER.*	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	SEATS RESERVED FOR INFORM MAJORS AS COURSE IS REQUIRED FOR MAJOR. ELIGIBLE STUDENTS MAY BE UNABLE TO ENROLL IN OPEN SEATS UNTIL THE RESERVE FOR INFORM MAJORS IS MET. A PREREQUISITE OF COMPSCI 186 (OR COMPSCI 187) WITH A C OR BETTER HAS BEEN APPROVED BY THE FACULTY SENATE FOR FALL 2021. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 326 WEB PROGRAMMING *Timothy Richards*	[COMPSCI 220 (OR COMPSCI 230) WITH A GRADE OF C OR BETTER] OR [INFO 248 AND (COMPSCI 186 OR COMPSCI 187) BOTH WITH A GRADE OF C OR BETTER].	JUNIOR AND SENIOR CS AND INFORMATICS MAJORS ONLY.	THIS COURSE IS HYBRID. STUDENTS IN LEC 01 WILL ATTEND CLASS IN PERSON ON TUESDAYS (LEC 02 WILL ATTEND CLASS IN PERSON ON THURSDAYS) AND ARE REQUIRED TO WATCH RECORDED LECTURES ASYNCHRONOUSLY FOR SECOND 75 MINUTES OF CLASS PER WEEK. IN-PERSON ATTENDANCE AT LABORATORY MEETINGS IS REQUIRED. NO OPTION FOR PASS/FAIL. SATISFIES INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS AND INFORM MAJORS. RESERVED SEATS: ELIGIBLE STUDENTS MAY BE UNABLE TO ENROLL IN OPEN SEATS UNTIL THE RESERVE FOR INFORM MAJORS IS MET. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 328 MOBILE HEALTH SENSING&ANALYTCS *Deepak Ganesan*	*COMPSCI 187 OR (INFO 248 AND COMPSCI 186) WITH A GRADE OF C OR BETTER.*	JUNIOR AND SENIOR CS AND INFORMATICS MAJORS ONLY.	RESERVED SEATS: ELIGIBLE STUDENTS MAY BE UNABLE TO ENROLL IN OPEN SEATS UNTIL THE RESERVE FOR INFORM MAJORS IS MET. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 345 PRACT & APPLICS OF DATA MGMT *Alexandra Meliou*	*COMPSCI 187 OR (INFO 248 AND COMPSCI 186) WITH A GRADE OF C OR BETTER.*	JUNIOR AND SENIOR CS AND INFORMATICS MAJORS ONLY.	STUDENTS ARE EXPECTED TO HAVE BASIC PROGRAMMING SKILLS, AND BE ABLE TO USE LAPTOPS IN CLASS. STUDENTS WHO HAVE TAKEN COMPSCI 445 ARE NOT ELIGIBLE. RESERVED SEATS: ELIGIBLE STUDENTS MAY BE UNABLE TO ENROLL IN OPEN SEATS UNTIL THE RESERVE FOR INFORM MAJORS IS MET. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

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COMPSCI 370 INTRO TO COMPUTER VISION *Subhransu Maji*	COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF 'C' OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	A BACKGROUND IN LINEAR ALGEBRA (MATH 235) IS RECOMMENDED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 373 INTRO TO COMPUTER GRAPHICS *Zachary While*	***COMPSCI 187 AND MATH 235 (OR INFO 150 OR COMPSCI 240) BOTH WITH A GRADE OF 'C' OR BETTER.***	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS WHO HAVE TAKEN COMPSCI 473 ARE NOT ELIGIBLE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 377 OPERATING SYSTEMS *Timothy Richards*	COMPSCI 230 WITH A GRADE OF 'C' OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 383 ARTIFICIAL INTELLIGENCE *Scott Niekum*	COMPSCI 220 (OR COMPSCI 230) AND COMPSCI 240 (OR STAT 515), BOTH WITH GRADE OF 'C' OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 389 INTRO TO MACHINE LEARNING *Cooper Sigrist*	COMPSCI 220 (OR COMPSCI 230), COMPSCI 240 (OR STATISTC 515), AND MATH 233 ALL WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	PREVIOUSLY COMPSCI 390A. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 390R REV ENGG AND VULNERABLTY ANALY *Brian Levine*	COMPSCI 230 (OR E&C-ENG 322 OR E&C-ENG 373) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS, INFORM AND CSENG MAJORS ONLY.	ALTHOUGH OPEN TO INFORM MAJORS, THIS COURSE DOES NOT COUNT AS AN INFORM ELECTIVE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: http://www.cics.umass.edu/overrides.
COMPSCI 398A P-CREDITED INTERNSHIP			CICS CAREERS AND INSTRUCTOR PERMISSION REQUIRED.
COMPSCI 420 SOFTWARE ENTREPRENEURSHIP *Neena Thota*	COMPSCI 326 (OR COMPSCI 320) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	PREVIOUSLY COMPSCI 490S. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides
COMPSCI 429 SOFTWARE ENGINEERING PROJ MGMT *Gordon Anderson, Heather Conboy, Jaime Davila, Matthew Rattigan*	COMPSCI 320 WITH A GRADE OF A- OR BETTER.	CS MAJORS ONLY.	MEETS WITH COMPSCI 320. EMAIL INSTRUCTOR FOR PERMISSION TO ENROLL. THEN, REFER TO INSTRUCTOR PERMISSION IN OVERRIDE REQUEST VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

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COMPSCI 445 INFORMATION SYSTEMS *Marco Serafini*	COMPSCI 220 (OR COMPSCI 230) AND COMPSCI 311 AND COMPSCI 345, ALL WITH GRADE OF 'C' OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	IF AVAILABLE SEATS, STUDENTS WHO ARE NOT CS MAJORS BUT HAVE SUFFICIENT PROGRAMMING EXPERIENCE, CS GRADUATE STUDENTS, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 446 SEARCH ENGINES *James Allan*	COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF 'C' OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	INSTRUCTOR WILL CONSIDER STAT515 AS AN ALTERNATE PREREQUISITE IN PLACE OF COMPSCI 240 VIA OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 453 COMPUTER NETWORKS *Phuthipong Bovornkeeratiroj, James Kurose*	COMPSCI 230 (OR COMPSCI 377) WITH A GRADE OF 'C' OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	COMPSCI 453-01 IS AN IN-PERSON SECTION. COMPSCI 453-02 IS AN ONLINE SECTION. STUDENTS ARE REQUIRED TO PARTICIPATE AT THE SCHEDULED MEETING TIME, TT 1:00-2:15. SYNCHRONOUS ATTENDANCE IS MANDATORY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 466 APPLIED CRYPTOGRAPHY *Adam O'Neill*	COMPSCI 311 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS WHO HAVE TAKEN HIGHER-LEVEL MATHEMATICS (IN PARTICULAR MATH 411, MATH 455, MATH 471, OR MATH 513/COMPSCI 575) ARE PARTICULARLY INVITED TO ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 490Q QUANTUM INFORMATION SCIENCE *Stefan Krastanov*	MATH 132, MATH 235, AND COMPSCI 240 (OR STATISTC 515), ALL WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	AFTER JUNIOR AND SENIOR CS AND INFORM MAJORS HAVE ENROLLED, THIS COURSE WILL OPEN TO JUNIOR AND SENIOR PHYSICS, MATH, AND ENGINEERING MAJORS, WHO SHOULD WAIT FOR THE COURSE TO OPEN TO ENROLL. MATH 233, COMPSCI 250 AND 311 ARE HELPFUL BUT NOT NECESSARY. PHYSICS MAJORS WITH A C OR BETTER IN PHYSICS 281 OR PHYSICS 287 MAY REQUEST AN OVERRIDE TO USE EITHER AS AN ALTERNATE FOR THE COMPSCI 240 PREREQUISITE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 490U INTRO TO UX RESEARCH *Ya Xiong*	COMPSCI 325 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	RESERVED SEATS: ELIGIBLE STUDENTS MAY BE UNABLE TO ENROLL IN OPEN SEATS UNTIL THE RESERVE FOR INFORM MAJORS IS MET. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides
COMPSCI 491G S-COMPUTER NETWORKING LAB *Arun Venkataramani*	COMPSCI 453 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS MAY WORK INDEPENDENTLY IN LGRT 224 TO COMPLETE LAB ASSIGNMENTS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 496C IS-SOC ENTRPRNRSHP LAUNCHPAD *Matthew Rattigan*	COMPSCI 420 (OR COMPSCI 490S) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	OPEN TO CS AND INFORM MAJORS WHO HAVE SUCCESSFULLY COMPLETED COMPSCI 420 (490S). INSTRUCTOR CONSENT REQUIRED.
COMPSCI 501 FORMAL LANGUAGE THEORY *David Barrington*	UNDERGRADUATES: COMPSCI 311 WITH A GRADE OF 'C' OR BETTER.	LECT 01: JUNIOR AND SENIOR CS AND MATH MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. IT IS RECOMMENDED THAT UNDERGRADUATE STUDENTS HAVE A GRADE OF B- OR BETTER IN COMPSCI 311 IN ORDER TO ATTEMPT 501. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

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COMPSCI 508 ETHICAL CONSIDRTNS IN COMPUTNG *Michelle Trim*		GRADUATE CMPSCI STUDENTS ONLY.	PREVIOUSLY COMPSCI 590E. INSTRUCTOR PERMISSION REQUIRED FOR UNDERGRADUATE CS AND INFORMATICS MAJORS MEETING THE PREREQUISITE OF CICS 305 WITH A C OR BETTER. THIS COURSE FULFILLS THE ETHICS REQUIREMENT FOR HLS INFORMATICS MAJORS. REFER TO CICS REGISTRATION UPDATES WEBPAGE FOR ADDITIONAL NOTES: https://www.cics.umass.edu/registration-updates. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 514 ALGORITHMS FOR DATA SCIENCE *Andrew McGregor*	UNDERGRADUATES: COMPSCI 240 (OR STATISTCS 515) AND COMPSCI 311 BOTH WITH A GRADE OF B+ OR BETTER (OR COMPSCI 240, STATISTCS 515, COMPSCI 311, MATH 233, AND MATH 235, ALL WITH A GRADE OF C OR BETTER).	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 520 THEORY AND PRACTICE-SOFTENGIN *Heather Conboy*	UNDERGRADUATES: COMPSCI 320 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 532 SYSTEMS FOR DATA SCIENCE *Peter Klemperer*	UNDERGRADUATES: COMPSCI 377 AND COMPSCI 445 WITH A GRADE OF C OR BETTER.	UNIV LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LECT 02: MS-CMPSCI STUDENTS ONLY. UWW LECT 01: GRADUATE STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS; SEATS HELD IN LECT 02 FOR INCOMING STUDENT REGISTRATION. PHD OR OTHER GRADUATE LEVEL STUDENTS WHO NEED A UNIVERSITY COURSE SHOULD REGISTER IN SECTION 02. UWW LECT 01 FOR ONLINE MS IN CS OR OTHER GRADUATE STUDENTS. STARTING IN FALL 2022, THE UNDERGRADUATE PREREQUISITE CHANGED TO COMPSCI 377 AND COMPSCI 445 WITH A C OR BETTER. COURSE IS ONLINE, SYNCHRONOUS LECTURES ON MW, 4-5:15 PM ARE AVAILABLE. LECTURES WILL BE RECORDED FOR VIEWING AT OTHER TIMES. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 535 COMPUTER ARCHITECTURE *Charles Weems*	UNDERGRADUATES: COMPSCI 335 WITH A GRADE OF 'C' OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 546 APPLIED INFORMATION RETRIEVAL *Razieh Rahimi*	UNDERGRADUATES: COMPSCI 320 AND COMPSCI 383 (OR COMPSCI 446 OR COMPSCI 585) WITH C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS SAVED IN LECT 02 FOR INCOMING STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 550 INTRODUCTION TO SIMULATION *Peter Haas*	***UNDERGRADUATES: COMPSCI 187 AND STATISTC 515 WITH A GRADE OF C OR BETTER.***	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	PREVIOUSLY COMPSCI 590M. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENTS. SOME BACKGROUND IN STOCHASTIC PROCESSES IS HELPFUL, BUT NOT REQUIRED, AS THE MATERIAL WILL BE DEVELOPED IN CLASS. INSTRUCTOR PERMISSION REQUIRED FOR UNDERGRADUATE IE MAJORS MEETING PREREQUISITES AND GRADUATE IE STUDENTS. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 561 SYSTEM DEFENSE AND TEST *Parviz Kermani*	*UNDERGRADUATES: COMPSCI 360 (OR COMPSCI 460 OR COMPSCI 560 OR COMPSCI 660) AND COMPSCI 453, BOTH WITH A GRADE OF C OR BETTER.*	UNIV LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LECT 02: GRADUATE CMPSCI AND ECE STUDENTS ONLY. UWW LECT 01: GRADUATE CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. CSENG MAJORS WITH APPROPRIATE BACKGROUND WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS IN LECT 01. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides. UWW LECT 01: ONLINE COURSE FOR GRADUATE CMPSCI STUDENTS ONLY. GRADUATE STUDENTS FROM OTHER DEPARTMENTS WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. REGISTRATION FOR UWW SECTION: https://www.umass.edu/online/how-enroll

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS *INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.*
COMPSCI 564 CYBER EFFECTS *Seth Landsman, Nick Merlino, Daniel Walters, Edward Walters*	UNDERGRADUATES: COMPSCI 230 (OR E&C-ENG 322) AND COMPSCI 360 (OR COMPSCI 460 OR E&C-ENG 371) BOTH WITH A GRADE OF C OR BETTER.	UNIV LECT 01: JUNIORS AND SENIORS ONLY. UNIV LECT 02: GRADUATE CMPSCI AND ECE STUDENTS ONLY. UWW LECT 01: GRADUATE CMPSCI STUDENTS ONLY.	PREVIOUSLY COMPSCI 590J. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. UNDERGRADS MAY SUBSTITUTE ANY INTRODUCTION TO COMPUTER/NETWORK SECURITY COURSE AT THE 300-LEVEL OR HIGHER WITH A GRADE OF C OR BETTER FOR COMPSCI 360, WITH PERMISSION OF INSTRUCTOR. SEATS HELD IN LECT 02 FOR INCOMING STUDENT REGISTRATION. OTHER GRADUATE STUDENTS WITH PERMISSION OF INSTRUCTOR. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides. UWW LECT 01: OTHER GRADUATE STUDENTS MAY BE CONSIDERED WITH INSTRUCTOR PERMISSION. SYNCHRONOUSLY REMOTE ATTENDANCE VIA ZOOM REQUIRED. STUDENTS SHOULD ATTEND ALL LECTURE SESSIONS.
COMPSCI 565 ADV DIGITAL FORENSIC SYSTEMS *Peter Klemperer*	UNDERGRADUATES: COMPSCI 365 OR COMPSCI 377 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: GRADUATE CMPSCI AND ECE STUDENTS ONLY. UWW LECT 01: GRADUATE CMPSCI STUDENTS ONLY.	PREVIOUSLY COMPSCI 590K. STUDENTS WHO HAVE COMPLETED COMPSCI 590F ARE NOT ELIGIBLE FOR THIS COURSE. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. CLASS IS ONLINE. MOODLE WILL BE USED AND ECHO360 FOR LECTURE VIDEO DISTRIBUTION. SENIOR AND JUNIOR CSENG MAJORS WITH APPROPRIATE BACKGROUND WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 574 INTELLIGENT VISUAL COMPUTING *Evangelos Kalogerakis*	UNDERGRADUATES: COMPSCI 311, COMPSCI 383, COMPSCI 373 (OR COMPSCI 473), ALL WITH A GRADE OF B OR BETTER.	UNIV LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. UNIV LECT 02: MS-CMPSCI STUDENTS ONLY. UWW LECT 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.	PREVIOUSLY COMPSCI 590IV. MEETS WITH COMPSCI 674. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS SAVED IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. INSTRUCTOR WILL CONSIDER UNDERGRADUATES WITH ALTERNATE PREREQUISITES OF COMPSCI 589 OR COMPSCI 682 IN PLACE OF COMPSCI 373(473), IF AVALIABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 589 MACHINE LEARNING *Bruno Castro da Silva*	UNDERGRADUATES: [MATH 545 AND STATISTCS 515 AND COMPSCI 240, ALL WITH A GRADE OF C OR BETTER.] OR [MATH 545 WITH A GRADE OF C OR BETTER AND COMPSCI 240 WITH A GRADE OF B+ OR BETTER.] OR [MATH 235 AND MATH 233, BOTH WITH A GRADE OF B+ OR BETTER, AND STATISTCS 515 AND COMPSCI 240, BOTH WITH A GRADE OF C OR BETTER.] OR [MATH 235 AND MATH 233 AND COMPSCI 240, ALL WITH A GRADE OF B+ OR BETTER.]	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 591NR S-NEURAL NETWRKS:NEUROSC/ENGG *Hava Siegelmann*	UNDERGRADUATES: COMPSCI 311 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR UNDERGRADUATES ONLY. LECT 02: MS-CMPSCI STUDENTS ONLY.	MEETS WITH COMPSCI 691NR. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. UNDERGRADUATE COURSE IN ALGORITHMS EQUIVALENT TO COMPSCI 311 IS ASSUMED FOR GRADUATE STUDENTS TAKING THIS COURSE. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 596E IS-ML APPLIED TO CHILD RESCUE *Benjamin Glickenhaus*		UNIV LECT 01: SENIOR CS MAJORS AND CS GRADUATE STUDENTS ONLY. UWW LECT 01: ONLINE MS-CMPSCI PROGRAM ONLY.	INSTRUCTOR PERMISSION REQUIRED. CS SENIOR OR CS GRADUATE STUDENT WITH A MACHINE LEARNING BACKGROUND. WE EXPECT HIGH GRADES IN COMPSCI 589 OR COMPSCI 682. SYNCHRONOUS MEETINGS ARE REQUIRED. CONTACT INSTRUCTOR FOR CONSIDERATION AT bglickenhaus@umass.edu.
COMPSCI 603 ROBOTICS *Hao Zhang*		CMPSCI GRADUATE STUDENTS ONLY.	A BACKGROUND IN LINEAR ALGEBRA, DIFFERENTIAL EQUATIONS, AND PROGRAMMING SKILLS ARE ASSUMED. INSTRUCTOR PERMISSION REQUIRED FOR UNDERGRADUATE CS MAJORS CLEARED BY THE UPD, IF AVAILABLE SEATS. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 611 ADVANCED ALGORITHMS *Hung Le*		CMPSCI GRADUATE STUDENTS ONLY.	INSTRUCTOR PERMISSION REQUIRED FOR UNDERGRADUATE CS MAJORS CLEARED BY THE UPD, IF AVAILABLE SEATS. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS *INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.*

COMPSCI 621
ADV SOFTENG:ANALYSIS & EVAL

Yuriy Brun

GRADUATE CMPSCI STUDENTS ONLY.

SEATS HELD FOR INCOMING STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

COMPSCI 625
ADVANCED METHODS IN HCI

Narges Mahyar

CMPSCI GRADUATE STUDENTS ONLY.

PREVIOUSLY COMPSCI 690A. STUDENTS ARE EXPECTED TO HAVE TAKEN AN HCI COURSE PRIOR TO TAKING THIS COURSE. WHILE THERE ARE NO OTHER FORMAL PREREQUISITES, THE ABILITY TO DO SOFTWARE DEVELOPMENT WILL BE AN ASSET FOR THIS COURSE. ALTERNATE TOOLS THAT REQUIRE MINIMAL PROGRAMMING WILL, HOWEVER, BE POSSIBLE. FURTHER, THERE WILL BE SOME COVERAGE OF EXPERIMENTAL DESIGN AND ANALYSIS, WHICH RELIES ON SOME BASIC STATISTICAL KNOWLEDGE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

COMPSCI 627
FIXING SOCIAL MEDIA

Ethan Zuckerman

CMPSCI GRADUATE STUDENTS ONLY.

PREVIOUSLY COMPSCI 697M. CROSS-LISTED WITH COMM 627 AND SPP 627.

COMPSCI 630
SYSTEMS

Emery Berger

GRADUATE CMPSCI STUDENTS ONLY.

SENIOR CS MAJORS WITH PERMISSION OF INSTRUCTOR AND UPD; BACKGROUND IN UNDERGRAD OS IS HELPFUL. SEATS HELD FOR INCOMING STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

COMPSCI 651
OPTIMIZATION IN CS

Madalina Fiterau Brostean

GRADUATE CMPSCI STUDENTS ONLY.

PREVIOUSLY COMPSCI 690OP. GRADUATE STUDENTS ENTERING THE COURSE ARE EXPECTED TO HAVE A STRONG WORKING KNOWLEDGE OF LINEAR ALGEBRA (MATH 545 EQUIVALENT) AND CALCULUS (EQUIVALENT TO A GRADE OF A IN MATH 233), AS WELL AS BASIC KNOWLEDGE OF PROBABILITY AND STATISTICS. SOLID PROGRAMMING SKILLS IN A HIGH-LEVEL LANGUAGE SUCH AS PYTHON, R OR MATLAB ARE EXPECTED. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

COMPSCI 674
INTELLIGENT VISUAL COMPUTING

Evangelos Kalogerakis

UNIV LECT 01: GRADUATE CMPSCI STUDENTS ONLY.
UWW LECT 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.

PREVIOUSLY COMPSCI 690IV. MEETS WITH COMPSCI 574. CMPSCI GRADUATES AND OTHERS ARE ASSUMED TO HAVE SUCCESSFULLY COMPLETED PREREQS OR EQUIV: COMPSCI 311, 383, AND 373 (OR 473), ALL WITH A GRADE OF A- OR BETTER. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA ON-LINE FORM: https://www.cics.umass.edu/overrides.

COMPSCI 677
DISTRIBUTED AND OPERATING SYS

Prashant Shenoy

UNIV LECT 01: GRADUATE CMPSCI AND ECE STUDENTS ONLY.
UNIV LECT 02: GRADUATE CMPSCI AND ECE STUDENTS ONLY.
UWW LECT 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.

LECTURES AVAILABLE BOTH SYCHRONOUSLY AND ASYNCHRONOUSLY. LECTURE RECORDINGS ARE AVAILABLE TO ALL STUDENTS IMMEDIATELY AFTER EACH CLASS. INSTRUCTOR PERMISSION REQUIRED FOR SENIOR CS MAJORS CLEARED BY THE UPD, IF AVAILABLE SEATS. BACKGROUND IN UNDERGRAD OS (COMPSCI 377) IS HELPFUL. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. MS-ECE STUDENTS MAY ENROLL IN UNIVERSITY SECTION, BUT NOT UWW SECTION. UNIV LECT 01: IN-PERSON, OPEN TO GRADUATE CMPSCI AND ECE STUDENTS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

COMPSCI 683
ARTIFICIAL INTELLIGENCE

Yair Zick

GRADUATE CMPSCI STUDENTS ONLY.

STUDENTS WHO HAVE TAKEN AN UNDERGRADUATE AI COURSE PREFERRED. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

COMPSCI 685
ADV NATURAL LANG PROCESSING

Mohit Iyyer

UNIV LECT 01: GRADUATE CMPSCI STUDENTS ONLY.
UWW LECT 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.

PHD-LING STUDENTS WITH PERMISSION OF INSTRUCTOR. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA ON-LINE FORM: https://www.cics.umass.edu/overrides.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS *INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.*
COMPSCI 688 PROBABILISTIC GRAPHICAL MODELS *Daniel Sheldon*		GRADUATE CMPSCI STUDENTS ONLY.	SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 689 MACHINE LEARNING *Brendan O'Connor*		UNIV LECT 01: CMPSCI GRADUATE STUDENTS ONLY. UWW LECT 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.	PERMISSION OF INSTRUCTOR FOR CS MAJORS MEETING THE PREREQUISITE OF MATH 132 AND MATH 235, AND EITHER STATISTCS 515 OR 607 OR 608, IF CLEARED BY THE UPD AND AVAILABLE SEATS. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 691NR S-NEURAL NETWRKS:NEUROSC/ENGG *Hava Siegelmann*		GRADUATE CMPSCI STUDENTS ONLY.	MEETS WITH COMPSCI 591NR. UNDERGRADUATE COURSE IN ALGORITHMS EQUIVALENT TO COMPSCI 311 IS ASSUMED. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 691O S-TOOLS-EXPLANATORY/TUTRNG SYS *Beverly Woolf*		GRADUATE STUDENTS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 692L S-NATURAL LANGUAGE PROCESSING *Mohit Iyyer*		PHD CMPSCI STUDENTS ONLY.	MAY BE REPEATED FOR CREDIT UP TO 3 TIMES. INTERESTED LINGUISTICS PHD STUDENTS WITH PERMISSION OF INSTRUCTOR. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 692U S-QUANTUM ERROR CORRECTION *Stefan Krastanov, Donald Towsley*		GRADUATE CMPSCI STUDENTS ONLY.	SECT 01=3 CREDITS; SECT 02=1 CREDIT. STUDENTS CAN REGISTER FOR EITHER ONE CREDIT OR THREE CREDITS. ALL STUDENTS WILL BE EXPECTED TO MAKE AT LEAST ONE PRESENTATION FOR A MINIMUM OF ONE CREDIT. IN ADDITION, STUDENTS TAKING THIS COURSE FOR THREE CREDITS WILL PROPOSE AND COMPLETE A COURSE PROJECT IN CONSULTATION WITH THE INSTRUCTORS. GRADUATE PHYSICS, MATH, AND ENGINEERING STUDENTS MAY BE INTERESTED AND WILL BE CONSIDERED VIA OVERRIDE. INSTRUCTOR PERMISSION REQUIRED FOR MOTIVATED UNDERGRADUATES CLEARED BY THE UPD, IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 696DS IS-DATA SCIENCE *Andrew McCallum*		MS-CMPSCI WITH A DATA SCIENCE CONCENTRATION.	BY THE END OF THE CURRENT FALL SEMESTER, STUDENTS MUST HAVE COMPLETED AT LEAST TWO OF THE DATA SCIENCE CORE REQUIREMENTS AND HAVE AN OVERALL GPA OF 3.0 OR HIGHER. PERMISSION OF INSTRUCTOR IS REQUIRED. ELIGIBLE STUDENTS ARE EMAILED INSTRUCTIONS ON HOW TO APPLY FOR CONSIDERATION.
COMPSCI 701 ADV TOPICS IN CMPSCI		DOCTORAL, MASTERS GRADUATE CMPSCI STUDENTS ONLY.	THE 3 CREDIT OPTION IS FOR THE SECOND SEMESTER OF A TWO-SEMESTER SEQUENCE, 701Y FOLLOWED BY 701. THE 6 CREDIT OPTION IS FOR A PROJECT THAT WILL BE BEGUN AND COMPLETED WITHIN THE SAME SEMESTER. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FORM: https://www.cics.umass.edu/content/registration
COMPSCI 701Y ADV TOPICS IN CMPSCI (1ST SEM)		DOCTORAL, MASTERS CMPSCI GRADUATE STUDENTS ONLY.	INDICATES THE FIRST SEMESTER OF A TWO-SEMESTER SEQUENCE, 701Y (3 CREDITS) FOLLOWED BY 701 (3 CREDITS), WITH GRADE FOR BOTH ASSIGNED AT THE END. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FORM: https://www.cics.umass.edu/content/registration

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS _INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT._
COMPSCI 879 TEACH ASSTS-TOMORROW'S FACULTY _Ivon Arroyo_			CREDIT CHANGE FROM 1 TO 2 CREDITS, EFFECTIVE FALL 2022. COURSE IS ASSOCIATED WITH CICS TA EMPLOYMENT. REQUIRED COMPONENT OF TA CONTRACT. REGISTRATION WILL BE PROCESSED BY THE ASSISTANT DIRECTOR GRADUATE PROGRAMS AFTER SIGNED AND APPROVED CONTRACT. OPEN TO CICS TEACHING ASSISTANTS ONLY.
COMPSCI 891M S-THEORY OF COMPUTATION _Hung Le_		DOCTORAL, MASTERS GRADUATE STUDENTS ONLY.	MAY BE REPEATED FOR CREDIT UP TO 6 TIMES. OTHERS NOT MEETING ELIGIBILITY, OR STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 899 PHD DISSERTATION			COURSE OPEN ONLY TO CS GRADUATE STUDENTS WHO HAVE PASSED PORTFOLIO. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FORM: https://www.cics.umass.edu/content/registration
COMPSCI H250 HNRS COLLOQ: INTRO COMPUTATION _David Barrington_	_COMPSCI 187 (OR E&C-ENG 241 OR INFO 190T/CICS 160) AND MATH 132 WITH A GRADE OF C OR BETTER (OR COMPSCI 250 WITH A GRADE OF B OR BETTER)._	COMMONWEALTH HONORS COLLEGE CS AND MATH MAJORS ONLY.	DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 250 (OR HAVE COMPLETED COMPSCI 250 WITH A GRADE OF B OR BETTER). OTHER CHC MAJORS CONSIDERED IF AVAILABLE SEATS. INTERESTED STUDENTS MUST COMPLETE OVERRIDE REQUEST VIA ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI H311 HNRS COLLOQ: INTRO ALGORITHMS _Marius Minea_	_COMPSCI 187 AND COMPSCI 250 (OR MATH 455) WITH A GRADE OF C OR BETTER (OR COMPSCI 311 WITH A GRADE OF B OR BETTER)._	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS AND MATH MAJORS ONLY.	DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 311 (OR HAVE COMPLETED COMPSCI 311 WITH A GRADE OF B OR BETTER). INTERESTED STUDENTS MUST COMPLETE OVERRIDE REQUEST VIA ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI H370 HNRS COLLOQ: INTRO COMPTR VISN _Subhransu Maji_	_COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C OR BETTER (OR COMPSCI 370 WITH A GRADE OF B OR BETTER)._	JUNIOR AND SENIOR CS MAJORS IN COMMONWEALTH HONORS COLLEGE.	DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 370 (OR HAVE COMPLETED COMPSCI 370 WITH A GRADE OF B OR BETTER). INTERESTED STUDENTS MUST COMPLETE OVERRIDE REQUEST VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI H377 HNRS COLLOQ: OPERATING SYSTEMS _Timothy Richards_	_COMPSCI 230 WITH A GRADE OF C OR BETTER (OR COMPSCI 377 WITH A GRADE OF B OR BETTER)._	OPEN TO SENIOR AND JUNIOR COMMONWEALTH HONORS COLLEGE CS MAJORS ONLY.	NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 377 (OR HAVE COMPLETED COMPSCI 377 WITH A GRADE OF B OR BETTER). REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI H453 HNRS COLLOQ: COMPUTER NETWORKS _James Kurose_	_COMPSCI 230 (OR COMPSCI 377) WITH A GRADE OF C OR BETTER (OR COMPSCI 453 WITH A GRADE OF B OR BETTER)._	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY.	DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 453 (OR HAVE COMPLETED COMPSCI 453 WITH A GRADE OF B OR BETTER). INTERESTED STUDENTS MUST COMPLETE OVERRIDE REQUEST VIA ON-LINE FORM: https://www.cics.umass.edu/overrides.
INFO 101 INTRO TO INFORMATICS _Cheryl Swanier_		UNDERGRADUATE NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. FOUNDATIONS COURSE FOR THE INFORMATICS MAJOR. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS *INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.*
INFO 150 MATH FOUND-INFORMATICS *Mohammadhassan Hajiesmaili*		UNDERGRADUATE NON-CS AND NON-MATH/STATS MAJORS ONLY.	CS AND MATH (STATISTICS) MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER INFORM MAJORS REGISTER, INFO 150 WILL OPEN TO ALL NON-CS UNDERGRADUATES. R1 MATH USEFUL; NOT ABSOLUTELY REQUIRED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
INFO 203 A NETWORKED WORLD *Parviz Kermani*		UNDERGRADUATE NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER INFORM MAJORS REGISTER, INFO 203 WILL OPEN TO ALL NON-CS UNDERGRADUATES. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
INFO 248 INTRO TO DATA SCIENCE *Gordon Anderson*	*COMPSCI 121 AND PSYCH 240 (OR OIM 240, OR STATISTCS 240, OR STATISTCS 515, OR RES-ECON 212, OR SOCIOL 212) BOTH WITH A GRADE OF C OR BETTER.*	INFORM MAJORS ONLY.	PREVIOUS EXPERIENCE WITH A PROGRAMMING LANGUAGE (OTHER THAN COMPSCI 121) MAY BE CONSIDERED FOR OVERRIDE. BASIC MATHEMATICAL MATURITY (COLLEGE ALGEBRA) IS ASSUMED. BASIC PROBABILITY AND STATISTICS, SUCH AS ONE OF THE COURSES REQUIRED FOR REGISTRATION ON SPIRE IS REQUIRED. THIS COURSE CONSISTS OF TWO LECTURES AND ONE LAB SECTION PER WEEK. EACH LECTURE MEETING INCLUDES A PRESENTATION OF CONCEPTUAL MATERIAL AS WELL AS SOME TIME TO WORK ON IMPLEMENTATION OF THE MATERIAL PRESENTED. IN LAB TIME, STUDENTS RECEIVE DETAILED INSTRUCTION ON THE USE OF SOFTWARE TOOLS TO ANALYZE ACTUAL DATA SETS. READINGS WILL BE ASSIGNED AS PREPARATION FOR EACH CLASS MEETING. A PROJECT WILL BE ASSIGNED DURING THE COURSE. STUDENTS WORK IN PAIRS ON THE PROJECT. THE PROJECT PROVIDES STUDENTS WITH AN OPPORTUNITY TO WORK COLLABORATIVELY TO EXPLORE A TOPIC IN MORE DEPTH. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
INFO 490PI PERSONAL HEALTH INFORMATICS *Ravi Karkar*	INFO 248 AND (COMPSCI 186 OR COMPSCI 187 OR CICS 210).	JUNIOR AND SENIOR INFORM MAJORS ONLY.	NO PASS/FAIL OPTION. SATISFIES INTEGRATIVE EXPERIENCE REQUIREMENT FOR INFORM MAJORS. SPRING 2023 ONLY: CS MAJORS WITH A C OR BETTER IN COMPSCI 240 MAY REQUEST AN OVERRIDE FOR INFO 490PI TO COUNT AS A CS400 ELECTIVE IN ADDITION TO SATISFYING THE IE REQUIREMENT. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
INFO H490PI HNRS COLLOQ: PERS HLTH INFORM *Ravi Karkar*	*INFO 248 AND (COMPSCI 186 OR COMPSCI 187 OR CICS 210), (OR INFO 490PI WITH A GRADE OF B OR BETTER).*	JUNIOR AND SENIOR CS AND INFORM MAJORS IN COMMONWEALTH HONORS COLLEGE.	NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN INFO 490PI (OR HAVE COMPLETED INFO 490PI WITH A GRADE OF B OR BETTER). SPRING 2023 ONLY: CS MAJORS WITH A C OR BETTER IN COMPSCI 240 ENROLLED IN INFO 490PI ARE ELIGIBLE. REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides