SPIRE REGISTRATION INFORMATION for 2024 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 *Meng-Chieh Chiu, Fatemeh Ghaffari, Ghazaleh Parvini, Allison Poh, Cole Reilly, Manan Talwar*	COMPLETION OF THE R1 GEN ED (OR A SCORE OF 15 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, SOPHOMORE AND JUNIORS ONLY.	PREVIOUSLY INFO 190S. STUDENTS ARE NOT PERMITTED TO TAKE CICS 110 AFTER SUCCESSFULLY COMPLETING COMPSCI 121 OR INFO 190S. A PRERBQUISITE CHANGE TO ALLOW STUDENTS WITH A MATH PLACEMENT TEST (MPT) SCORE OF 15 OR HIGHER HAS BEEN APPROVED, EFFECTIVE SUMMER 2023. AFTER ELIGIBLE CS, INFORM, MATH, AND PHYSICS MAJORS HAVE ENROLLED, WILL OPEN TO FRESHMEN, SOPHOMORE, AND JUNIOR UNDERGRADUATES, IF AVAILABLE SEATS. FRESHMEN, SOPHOMORE, AND JUNIORS IN OTHER MAJORS SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO THE WAITLIST IF AVAILABLE AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
CICS 127 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 160 OBJECT-ORIENTED PROGRAMMING *Gordon Anderson*	CICS 110 (PREVIOUSLY INFO 190S) OR COMPSCI 121 WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE AND JUNIORS ONLY.	PREVIOUSLY INFO 190T. STUDENTS ARE NOT PERMITTED TO TAKE CICS 160 AFTER SUCCESSFULLY COMPLETING COMPSCI 186 OR INFO 190T. USE OF PERSONAL LAPTOP IN CLASS IS REQUIRED. AFTER ELIGIBLE CS/INFORM MAJORS HAVE ENROLLED, WILL OPEN TO FRESHMEN, SOPHOMORE, AND JUNIOR NON-CS/INFORM MAJORS, IF AVAILABLE SEATS. FRESHMEN, SOPHOMORE, AND JUNIOR NON-CS/INFORM MAJORS 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 OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
CICS 210 DATA STRUCTURES *Mordecai Golin, Marc Liberatore*	CICS 160 (PREVIOUSLY INFO 190T) WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE AND JUNIORS ONLY.	STUDENTS ARE NOT PERMITTED TO TAKE CICS 210 AFTER SUCCESSFULLY COMPLETING COMPSCI 187. AFTER ELIGIBLE CS/INFORM MAJORS HAVE ENROLLED, WILL OPEN TO FRESHMEN, SOPHOMORE, AND JUNIOR NON-CS/INFORM MAJORS, IF AVAILABLE SEATS. FRESHMEN, SOPHOMORE, AND JUNIOR NON-CS/INFORM MAJORS 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.
CICS 256 MAKE: PHYSICAL COMPUTING *Md Farhan Tasnim Oshim*	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER AND BASIC MATH SKILLS (R1).	FRESHMAN, 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 FRESHMEN BS-CS MAJORS ONLY. AFTER SOPHOMORE AND FRESHMEN REGISTER, PROGRAM WILL CONSIDER OPENING TO JUNIOR BS-CS MAJORS, IF AVAILABLE SEATS. JUNIOR BS-CS MAJORS SHOULD WAIT FOR ELIGIBILITY TO OPEN 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.
CICS 291S S-CICS SECOND YEAR PATHWAYS *Emma Anderson*	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER.	SOPHOMORE, JUNIOR, AND SENIOR CS MAJORS ONLY.	CS MAJORS MUST BE TAKING AT LEAST ONE COMPSCI 200-LEVEL CORE CONCURRENTLY TO BE ELIGIBLE. NON-CS MAJORS WHO HAVE TAKEN (OR ARE TAKING) AT LEAST TWO COMPSCI 200-LEVEL CORE WILL BE CONSIDERED IF AVAILABLE SEATS. INTERESTED STUDENTS SHOULD COMPLETE THE ONLINE FORM: https://forms.gle/3RsgkVzEtPKoqnUj6
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, Boming Zhang*	CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR COMPSCI 187) WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE, AND JUNIOR CS AND 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, Elizabeth Gunther, Siobhan Meï, Justin Obara, Samuel Pulford, 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..., 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: 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		UNDERGRADUATE CS MAJORS ONLY.	INTERNATIONAL UNDERGRADUATE STUDENTS SHOULD REFER TO THE IPO WEBSITE FOR DETAILS ABOUT CURRICULAR PRACTICAL TRAINING (CPT). SEE 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/SUMMER IN THE UWW SECTION. DETAILS ABOUT REGISTRATION AND THE CPT APPLICATION PROCESS FOR CMPSCI GRADUATE STUDENTS: https://www.cics.umass.edu/careers/articles/cpt-process-internships
COMPSCI 119 INTRO PROGRAMMING *Cole Reilly*		FRESHMEN, SOPHOMORE AND JUNIOR NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER SOPHOMORES 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 119 INTRO PROGRAMMING *Cole Reilly*		FRESHMEN, SOPHOMORE AND JUNIOR NON-CS MAJORS ONLY.	CS MAJORS ARE NOT ELIGIBLE FOR THIS COURSE. AFTER SOPHOMORES 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 198C P-INTRO-C PROGRAMMING LANGUAGE *Meng-Chieh Chiu, Timothy Richards*	COMPSCI 121 WITH A GRADE OF B OR BETTER, OR CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186) WITH A GRADE OF C OR BETTER.	FRESHMEN, SOPHOMORE, AND JUNIORS ONLY.	STARTING FALL 2023, PASSING COMPSCI 198C IS A REQUIRED PREREQUISITE FOR COMPSCI 230. INITIAL ELIGIBILITY IS LIMITED TO FRESHMEN, SOPHOMORE AND JUNIOR CS MAJORS. PROGRAM WILL CONSIDER OPENING REGISTRATION AFTER FRESHMEN HAVE ENROLLED. NON-CS MAJORS SHOULD WAIT UNTIL THE MAJOR RESTRICTION IS REMOVED AND SELF-ENROLL ON SPIRE AND SHOULD NOT REQUEST AN OVERRIDE. STUDENTS WITH AP OR TRANSFER CREDIT FOR COMPSCI 121 WILL NEED AN OVERRIDE FOR REGISTRATION, BUT NON-CS MAJORS SHOULD REFRAIN FROM REQUESTING OVERRIDE UNTIL MAJOR RESTRICTION IS REMOVED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 220 PGMG METHODOLOGY *Jaime Davila*	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER.	CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 230 CMPTR SYS PRINC *Meng-Chieh Chiu*	CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER AND COMPSCI 198C.	CS MAJORS ONLY.	STARTING FALL 2023, PASSING COMPSCI 198C IS A REQUIRED PREREQUISITE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides. The course provides flexible instructional modes. The Flex model allows students to attend class in three different modes: face-to-face synchronously, online synchronously, or asynchronously. Assignments are consistent across all attendance modes, and exams will be conducted in-person.

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COMPSCI 240 RSNG UNDER UNCERTAINTY _Shiting Lan, Mark Wilson_	CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 187) AND MATH 132, BOTH WITH A GRADE OF C OR BETTER.	CS MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 250 INTRO TO COMPUTATION _David Barrington, Mordecai Golin_	CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 187 OR ECE 241) AND MATH 132, BOTH WITH A GRADE OF C OR BETTER.	CS, CSENG, AND MATH MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 311 INTRO TO ALGORITHMS _Marius Minea, Ghazaleh Parvini_	CICS 210 (OR COMPSCI 187) AND COMPSCI 250 (OR MATH 455), BOTH 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 _Yuriy Brun, Heather Conboy, 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. GRADUATING SENIORS ARE PRIORITIZED AND PRE-ENROLLED BY THE PROGRAM. 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_	CS MAJORS: CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER. INFORM MAJORS: INFO 248 AND CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR COMPSCI 187), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	SEATS SAVED FOR INFORM MAJORS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 326 WEB PROGRAMMING _Timothy Richards_	CS MAJORS: COMPSCI 220 (OR COMPSCI 230) WITH A GRADE OF C OR BETTER. INFORM MAJORS: INFO 248 AND CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR COMPSCI 187), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	THIS COURSE IS HYBRID. NO OPTION FOR PASS/FAIL. SATISFIES INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS AND INFORM MAJORS. STUDENTS IN LEC 01 WILL ATTEND CLASS IN PERSON ON TUESDAYS (LEC 02 WILL ATTEND CLASS IN PERSON ON THURSDAYS) AND STUDENTS ARE REQUIRED TO WATCH RECORDED LECTURES ASYNCHRONOUSLY FOR SECOND 75 MINUTES OF CLASS PER WEEK. REQUIRED LABORATORY ATTENDANCE IS ON-LINE SYNCHRONOUSLY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides. The course provides flexible instructional modes. This course is offered in 3 different modes to support students in all aspects of their lives. This includes the ability to make it to campus as well as taking courses that are offered at the same time as this course.
COMPSCI 345 PRACT & APPLICS OF DATA MGMT _Jaime Davila_	CS MAJORS: CICS 210 (OR COMPSCI 187) WITH A GRADE OF C OR BETTER. INFORM MAJORS: INFO 248 AND CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 186 OR COMPSCI 187), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM 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. SEATS SAVED FOR INFORM MAJORS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 348 _PRINCIPLES OF DATA SCIENCE_ David Jensen	CICS 210 (OR COMPSCI 187), COMPSCI 240, AND COMPSCI 250 (OR MATH 455), ALL 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 360 INTRO COMPUTER/NETWRK SECURITY _Shiqing Ma_	COMPSCI 230 WITH GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	BEGINNING IN FALL 2022, THIS COURSE CHANGED FROM COMPSCI 460 TO COMPSCI 360. THE PREREQUISITE CHANGED TO REQUIRE COMPSCI 230. THIS AND FUTURE OFFERINGS OF COMPSCI 360 WILL CONTINUE TO COUNT AS A CS ELECTIVE FOR THE CS MAJOR, BUT AT THE 300-LEVEL. 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 *Rui Wang*	CICS 210 (OR 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 *Matthew Rattigan*	COMPSCI 220 (OR COMPSCI 230) AND COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 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, Philip Thomas*	COMPSCI 220 (OR COMPSCI 230), COMPSCI 240 (OR STATISTC 315, PREVIOUSLY 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 390B HARNESS DATA SCI-SOCIETAL GOOD *Abhidip Bhattacharyya*	COMPSCI 230 AND COMPSCI 240 (OR STATISTC 315, PREVIOUSLY STATISTC 515), BOTH WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	NO PASS/FAIL OPTION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 390R REV ENGG AND VULNERABLTY ANALY *Steven Rossi*	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 391M S-MAKE: AUDIO CIRCUIT ANALYSIS *Brian Levine, Rui Wang*	CICS 256 OR COMPSCI 335 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS WITH AN EQUIVALENT E&C-ENG COURSE WILL BE CONSIDERED VIA OVERRIDE, IF AVAILABLE SEATS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 398A P-CREDITED INTERNSHIP			CICS CAREERS AND INSTRUCTOR PERMISSION REQUIRED.

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COMPSCI 420 SOFTWARE ENTREPRENEURSHIP *Neena Thota*	COMPSCI 320 (OR COMPSCI 326) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 429 SOFTWARE ENGINEERING PROJ MGMT *Yuriy Brun, Heather Conboy, Matthew Rattigan*	COMPSCI 320 WITH A GRADE OF B OR BETTER.	UNDERGRADUATE CS MAJORS ONLY.	INSTRUCTOR CONSENT REQUIRED. MEETS WITH COMPSCI 320. EFFECTIVE FALL 2023, PREREQUISITE CHANGE TO A GRADE OF B OR BETTER IN COMPSCI 320. ELIGIBLE STUDENTS MAY EMAIL INSTRUCTOR FOR PERMISSION TO ENROLL. ONCE APPROVED, REFER TO INSTRUCTOR PERMISSION IN OVERRIDE REQUEST VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 445 INFORMATION SYSTEMS *Trek Palmer*	COMPSCI 220 (OR COMPSCI 230) AND COMPSCI 311 AND COMPSCI 345, ALL WITH GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	WITH INSTRUCTOR PERMISSION, STUDENTS WITH PRIOR EXPERIENCE IN DATABASES MAY SUBSTITUTE ONE OF COMPSCI 320, 326, OR 377 WITH A GRADE OF C OR BETTER FOR COMPSCI 345. IF AVAILABLE SEATS, STUDENTS WHO ARE NOT CS MAJORS BUT HAVE SUFFICIENT PROGRAMMING EXPERIENCE OR CS GRADUATE STUDENTS MAY SUBMIT AN OVERRIDE FOR INSTRUCTOR CONSIDERATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 446 SEARCH ENGINES *Ali Montazeralghaem*	COMPSCI 240 OR COMPSCI 383 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	INSTRUCTOR WILL CONSIDER STATISTC 515 AS AN ALTERNATE PREREQUISITE IN PLACE OF COMPSCI 240 VIA OVERRIDE. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 453 COMPUTER NETWORKS *Arun Venkataramani*	COMPSCI 230 (OR COMPSCI 377) WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS MAJORS ONLY.	STUDENTS WILL BENEFIT SIGNIFICANTLY FROM A PRIOR OR CONCURRENT EXPOSURE TO PROBABILITY (COMPSCI 240), ALGORITHMS (COMPSCI 311), AND MULTI-THREADED PROGRAMMING (COMPSCI 377 OPERATING SYSTEMS) ALTHOUGH THESE ARE NOT STRICT PREREQUISITES, STUDENTS MUST BE ABLE TO PROGRAM IN A STRUCTURED HIGH-LEVEL PROGRAMMING LANGUAGE, SUCH AS JAVA, C OR C++, PYTHON, ETC. PROGRAMMING PROJECTS IN A LANGUAGE OF STUDENT CHOICE. COMPSCI 453-01 HAS ONLINE COMPONENTES AND PROVIDES FLIXIBLE MODES OF INSTRUCTION. PLEASE CONTACT INSTRUCTOR FOR DETAILS. STUDENTS ARE REQUIRED TO PARTICIPATE AT THE SCHEDULED MEETING TIME IF ATTENDING THE CLASS ONLINE. ALL EXAMS ARE IN PERSON. 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 485 APPLICATIONS OF NLP *Brendan O'Connor*	COMPSCI 220 AND COMPSCI 240, BOTH WITH A GRADE OF C OR BETTER (OR LINGUIST 429H/492B WITH A GRADE OF C OR BETTER).	JUNIOR AND SENIOR CS AND LINGUISTICS MAJORS ONLY.	PREVIOUSLY COMPSCI 490A. STUDENTS FROM OTHER DISCIPLINES WILL BE CONSIDERED AS WELL IF AVAILABLE SEATS. STUDENTS NEEDING INSTRUCTOR 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 315, PREVIOUSLY 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 SELF-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 491G S-COMPUTER NETWORKING LAB *Parviz Kermani*	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.

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COMPSCI 496C IS-SOC ENTRPRNRSHP LAUNCHPAD *Neena Thota*	COMPSCI 420 WITH A GRADE OF C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	INSTRUCTOR CONSENT REQUIRED. OPEN TO CS AND INFORM MAJORS WHO HAVE SUCCESSFULLY COMPLETED COMPSCI 420.
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 GRADUATE 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. INSTRUCTOR WILL CONSIDER CONCURRENT ENROLLMENT WITH COMPSCI 311 FOR STUDENTS WHO HAVE COMPLETED COMPSCI 250 WITH A GRADE OF A, IF AVAILABLE SEATS. 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 508 ETHICAL CONSIDRTNS IN COMPUTNG *Michelle Trim*		GRADUATE CMPSCI STUDENTS ONLY.	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 520 THEORY AND PRACTICE-SOFTENGIN *Juan Zhai*	UNDERGRADUATES: COMPSCI 320 (OR COMPSCI 220 AND COMPSCI 326) WITH C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI GRADUATE 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 528 MOBILE AND UBIQ COMPUTING *Phuc Nguyen*	UNDERGRADUATES: COMPSCI 230 AND COMPSCI 240 WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS. LECT 02: MS-CMPSCI GRADUATE STUDENTS ONLY.	PREVIOUSLY COMPSCI 590U. LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD IN LECT 02 FOR INCOMING GRAD STUDENT REGISTRATION. SOME BACKGROUND IN MACHINE LEARNING, SIGNAL PROCESSING, EMBEDDED SYSTEMS, PHYSICAL COMPUTING IS HELPFUL. INSTRUCTOR PERMISSION FOR STUDENTS WITH ALTERNATE PREREQUISITES. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ONLINE 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 GRADUATE STUDENTS ONLY. UWW LECT 01: ONLINE MS-CMPSCI PROGRAM 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, 2:30-3:45 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 GRADUATE 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 *Hamed Zamani*	UNDERGRADUATES: COMPSCI 320 (OR COMPSCI 326) AND COMPSCI 383 (OR COMPSCI 389 OR COMPSCI 446 OR COMPSCI 485 OR COMPSCI 585) BOTH WITH C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI GRADUATE 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: CICS 210 (OR COMPSCI 187) AND STATISTC 315 (PREVIOUSLY STATISTC 515), BOTH WITH A GRADE OF C OR BETTER.	LECT 01: JUNIOR AND SENIOR CS MAJORS ONLY. LECT 02: MS-CMPSCI GRADUATE 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.

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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.	UNIV LECT 01 FOR UNDERGRADS; UNIV LECT 02 FOR GRADS. CSENG MAJORS WITH APPROPRIATE BACKGROUND WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. UWW LECT 01: ONLINE COURSE FOR GRADUATE CMPSCI STUDENTS ONLY. GRADUATE STUDENTS FROM OTHER DEPARTMENTS 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 564 CYBER EFFECTS *Jeffrey Hamalainen, Seth Landsman, Nick Merlino, Edward Walters, Adam Woodbury*	UNDERGRADUATES: COMPSCI 230 (OR E&C-ENG 322) AND COMPSCI 360 (PREVIOUSLY COMPSCI 460 OR COMPSCI 365 OR COMPSCI 390R OR COMPSCI 466 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. UNIV LECT 01 FOR UNDERGRADS; UNIV 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. GRADUATE STUDENTS FROM OTHER DEPARTMENTS WITH INSTRUCTOR PERMISSION, IF AVAILABLE SEATS. UWW LECT 01: OTHER GRADUATE STUDENTS MAY BE CONSIDERED WITH INSTRUCTOR PERMISSION. SYNCHRONOUSLY REMOTE ATTENDANCE VIA ZOOM REQUIRED. STUDENTS SHOULD ATTEND ALL LECTURE SESSIONS. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 565 ADV DIGITAL FORENSIC SYSTEMS *Peter Klemperer*	UNDERGRADUATES: COMPSCI 365 OR COMPSCI 377 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.	PREVIOUSLY COMPSCI 590K. STUDENTS WHO HAVE COMPLETED COMPSCI 590F ARE NOT ELIGIBLE FOR THIS COURSE. UNIV LECT 01 FOR UNDERGRADS; UNIV 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. UWW LECT 01 FOR ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY. 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 GRADUATE STUDENTS ONLY. UWW LECT 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY.	MEETS WITH COMPSCI 674. UNIV LECT 01 FOR UNDERGRADS; UNIV 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 AVAILABLE SEATS. UWW LECT 01 FOR ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY. 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 315 (PREVIOUSLY 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 315 (PREVIOUSLY 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 GRADUATE STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR ELIGIBLE GRADS; 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 590AB QUANTUM CRYPTGRPHY AND COMMUN *Filip Rozpedek*	UNDERGRADUATES: MATH 132 AND MATH 235 AND COMPSCI 240 (OR STATISTC 515 OR PHYSICS 281 OR PHYSICS 287), ALL WITH A GRADE OF C OR BETTER.	LECT 01: SENIOR CS, MATH, PHYSICS, AND EE MAJORS ONLY. LECT 02: CMPSCI GRADUATE STUDENTS ONLY.	LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. SEATS HELD FOR INCOMING GRADUATE STUDENT REGISTRATION. THERE WILL BE CERTAIN OVERLAP WITH COMPSCI 490Q QUANTUM INFORMATION SCIENCE. WHILE COMPSCI 590AB BUILDS ON SOME OF THE CONCEPTS INTRODUCED IN 490Q, IT INTRODUCES ALL OF THEM INDEPENDENTLY SO NO KNOWLEDGE OF QUANTUM INFORMATION IS NECESSARY, THOUGH IT WOULD BE HELPFUL. THIS COURSE COUNTS TOWARDS THE MS SECURITY CONCENTRATION AND THE GRADUATE CERTIFICATE IN INFORMATION SECURITY. MATH, PHYSICS, AND EE GRADUATE STUDENTS SHOULD REQUEST AN OVERRIDE FOR CONSIDERATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 590AE MOBILE AND WIRELESS NETWORKS *James Kurose*	UNDERGRADUATE PREREQUISITE: COMPSCI 453 OR E&C-ENG 374 WITH A GRADE OF C OR BETTER.	UNIV LECT 01: JUNIOR AND SENIOR CS AND EE MAJORS ONLY. UNIV LECT 02: MS-CMPSCI AND MS-ECE STUDENTS ONLY. UWW LECT 01: MS-CMPSCI ONLINE PROGRAM STUDENTS ONLY.	UNIV LECT 01 FOR UNDERGRADS; LECT 02 FOR GRADS. THIS COURSE WILL BE TAUGHT AS A FLEXIBLE LEARNING COURSE. STUDENTS MAY TAKE EITHER WHOLLY IN-PERSON, OR WHOLLY ONLINE. AIMED MORE AT CS STUDENTS RATHER THAN EE STUDENTS. ASSUMES STUDENTS HAVE ALREADY HAD AN INTRODUCTORY NETWORKING COURSE (I.E., COMPSCI 453, E&C-ENG 374, OR EQUIVALENT). COURSE WILL OPEN TO EE MAJORS MEETING PREREQUISITE, IF AVAILABLE SEATS. EE MAJORS SHOULD WAIT FOR ELIGIBILITY TO OPEN TO SELF-ENROLL OR ADD TO THE WAITLIST AND SHOULD NOT REQUEST AN OVERRIDE. SEATS HELD FOR INCOMING GRADUATE STUDENT REGISTRATION. UWW LECT 01 FOR MS-CMPSCI ONLINE PROGRAM STUDENTS ONLY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 596E IS-ML APPLIED TO CHILD RESCUE *Brian Levine*		UNIV LECT 01: SENIOR CS MAJORS AND CS GRADUATE STUDENTS ONLY. UWW LECT 01: ONLINE MS-CMPSCI PROGRAM STUDENTS.	INSTRUCTOR PERMISSION REQUIRED. CS SENIOR OR CS GRADUATE STUDENT WITH A MACHINE LEARNING BACKGROUND. WE EXPECT HIGH GRADES IN COMPSCI 589 OR COMPSCI 682. PHDS OR ANY STUDENT WITH A TUITION WAIVER CANNOT ENROLL IN A UWW SECTION. SYNCHRONOUS MEETINGS ARE REQUIRED. CONTACT INSTRUCTOR FOR CONSIDERATION AT brian@cs.umass.edu.

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COMPSCI 603 ROBOTICS *Hao Zhang*		CMPSCI AND ECE 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 *Andrew McGregor*		CMPSCI GRADUATE STUDENTS ONLY.	MATHEMATICAL MATURITY WITH KNOWLEDGE OF ALGORITHMS AT THE LEVEL OF COMPSCI 311 EXPECTED OF INCOMING CS GRADUATE STUDENTS. 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 614 RANDMZD ALGRTHMS W/APPLC TO DS *Cameron Musco*		CMPSCI GRADUATE STUDENTS ONLY.	PREVIOUSLY COMPSCI 690RA. STRONG BACKGROUND IN ALGORITHMS AND MATHEMATICS, PARTICULARLY IN LINEAR ALGEBRA AND PROBABILITY IS REQUIRED. NOT RECOMMENDED FOR UNDERGRADUATES AND MS STUDENTS UNLESS SUCCESSFUL COMPLETION OF EITHER COMPSCI 514 OR COMPSCI 611. IF UNSURE OF PREPARATION, CONTACT INSTRUCTOR. 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 645 DB DSGN & IMPLMNTN *Alexandra Meliou*		CMPSCI GRADUATE STUDENTS ONLY.	STUDENTS SHOULD HAVE TAKEN AN UNDERGRADUATE LEVEL COURSE ON OPERATING SYSTEMS (COMPSCI 377) OR DATABASES (COMPSCI 445). 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 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 670 COMPUTER VISION *Grant Van Horn*		CMPSCI GRADUATE STUDENTS ONLY.	PREREQUISITES ARE LINEAR ALGEBRA, CALCULUS 1 AND 2, MULTI-VARIATE CALCULUS OR PERMISSION OF INSTRUCTOR. STATS 515 OR PERMISSION OF INSTRUCTOR. ADVANCED UNDERGRADUATES WITH PERMISSION OF INSTRUCTOR. SEATS HELD FOR INCOMING GRAD STUDENT REGISTRATION. STUDENTS NEEDING INSTRUCTOR 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.	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. UNIV LECT 02: ONLINE, OPEN TO GRADUATE CMPSCI AND ECE STUDENTS. UWW LECT 01: ONLINE MS-CMPSCI PROGRAM STUDENTS ONLY. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

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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.
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 690AB SYSTEMS FOR DEEP LEARNING *Hui Guan*		CMPSCI GRADUATE STUDENTS ONLY.	STUDENTS ARE REQUIRED TO BE FAMILIAR WITH BOTH PYTHON AND C/C++ PROGRAMMING, COMPUTER SYSTEMS, AND ALGORITHMS. SOME DEGREE OF PREVIOUS FAMILIARITY WITH MACHINE LEARNING IS LIKELY TO BE NECESSARY. GRADUATE STUDENTS FROM OTHER DEPARTMENTS WITH INSTRUCTOR APPROVAL. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 690G SECURTY FOR LARGE-SCALE SYSTMS *Pubali Datta*		CMPSCI GRADUATE STUDENTS ONLY.	SEATS SAVED FOR INCOMING GRADUATE STUDENT REGISTRATION. UNDERGRADUATE BACKGROUND IN COMPUTER SCIENCE IS ASSUMED TO INCLUDE OPERATING SYSTEMS (COMPSCI 377 OR EQUIVALENT). PROGRAMMING KNOWLEDGE AND PRINCIPLES OF COMPUTER SYSTEMS DESIGN KNOWLEDGE IS EXPECTED. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDE VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 690L DEEP GENERATIVE MODELS *Sajjad Amini*		CMPSCI GRADUATE STUDENTS ONLY.	A STRONG BACKGROUND IN PROBABILITY AND STATISTICS, LINEAR ALGEBRA, AND PYTHON PROGRAMMMING IS ASSUMED. IN ADDITION, BACKGROUND IN MACHINE LEARNING (COMPSCI 589 AND COMPSCI 689) AND NEURAL NETWORKS (COMPSCI 682) IS ASSUMED. SEATS SAVED FOR INCOMING GRADUATE STUDENT REGISTRATION.STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 690R CMPTNG FOR HUMAN MOVMNT ANALY *Sunghoon Lee*		CMPSCI, M&I-ENG, E&C-ENG, BMED-ENG, AND KIN GRADUATE STUDENTS ONLY.	THERE ARE NO FORMAL PREREQUISITES FOR GRADUATE STUDENTS, BUT INFORMALLY, STUDENTS SHOULD BE FAMILIAR WITH STATISTICS AND MACHINE LEARNING. KNOWLEDGE OF HEALTH DATA OR MEDICINE IS NOT A PREREQUISITE; THIS COURSE IS DESIGNED TO INTRODUCE THE CONCEPTS OF HEALTH AND MEDICAL DATA. SEATS SAVED FOR INCOMING GRADUATE STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 690S HUMAN-CENTRIC MACHINE LEARN *Scott Niekum*		CMPSCI GRADUATE STUDENTS ONLY.	NO FORMAL PREREQUISITES, BUT IT IS STRONGLY RECOMMENDED TO HAVE STRONG PROGRAMMING SKILLS, LINEAR ALGEBRA, PROBABILITY AND STATISTICS, MULTIVARIATE CALCULUS, AND GRADUATE-LEVEL MACHINE LEARNING. SEATS SAVED FOR INCOMING GRADUATE STUDENT REGISTRATION. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI 690U COMPUTNL BIOL AND BIOINFORMTCS *Anna Green*		CMPSCI GRADUATE STUDENTS ONLY.	PROFICIENCY IN PYTHON PROGRAMMING AS WELL AS UNDERGRADUATE-LEVEL UNDERSTANDING OF STATISTICS, MACHINE LEARNING, AND LINEAR ALGEBRA IS ASSUMED. THE COURSE ASSUMES NO PRIOR KNOWLEDGE OF BIOLOGY. MAY ALSO BE SUITABLE FOR GRADUATE STUDENTS IN BIOLOGY-RELATED DISCIPLINES WHO HAVE STRONG COMPUTATIONAL SKILLS. INTERESTED GRADUATE STUDENTS IN OTHER DISCIPLINES, ESPECIALLY BIOLOGY, SHOULD DESCRIBE THEIR BACKGROUND TO HANDLE COMPUTATIONAL REQUIREMENTS ON THE OVERRIDE FORM FOR INSTRUCTOR REVIEW. SEATS HELD FOR INCOMING GRADUATE STUDENT REGISTRATION. STUDENTS NEEDING INSTRUCTOR PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.

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COMPSCI 691O
S-TOOLS-EXPLANATORY/TUTRNG SYS

Beverly Woolf

- ELIGIBILITY: GRADUATE STUDENTS ONLY.
- NOTES: COURSE MEETS SYNCHRONOUSLY ONLINE ON TUESDAYS, 1:00-2:15 PM EDT. 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

- ELIGIBILITY: PHD CMPSCI GRADUATE STUDENTS ONLY.
- NOTES: INSTRUCTOR CONSENT REQUIRED. MAY BE REPEATED FOR CREDIT UP TO 3 TIMES. OPEN ONLY TO PHD STUDENTS WORKING WITH NLP FACULTY. INTERESTED LINGUISTICS PHD STUDENTS WITH PERMISSION OF INSTRUCTOR. SYNCHRONOUS MEETINGS ARE REQUIRED. CONTACT INSTRUCTOR FOR CONSIDERATION AT miyyer@cs.umass.edu.

COMPSCI 692Z
S-TOPICS IN QUANTUM NETWORKS

Kenneth Goodenough, Filip Rozpedek, Donald Towsley

- ELIGIBILITY: CMPSCI GRADUATE STUDENTS ONLY.
- NOTES: SECT 01=3 CREDITS; SECT 02=1 CREDIT. ASSUMED BACKGROUND: COMPSCI 490Q QUANTUM INFORMATION SCIENCE, COMPSCI 590Q OR COMPSCI 648 (PREVIOUSLY COMPSCI 690Q) QUANTUM INFORMATION SYSTEMS, OR EQUIVALENT COURSES FROM PHYSICS, ECE, OR OTHER UNIVERSITIES. STUDENTS CAN REGISTER FOR EITHER ONE CREDIT OR THREE CREDITS. ALL STUDENTS TAKING THE SEMINAR FOR CREDIT WILL BE EXPECTED TO PRESENT PAPERS ON LISTED TOPICS AND TO PARTICIPATE IN CLASSROOM DISCUSSION. STUDENTS TAKING THE SEMINAR FOR 3 CREDITS WILL BE EXPECTED TO PROPOSE AND COMPLETE A PROJECT. INSTRUCTOR PERMISSION REQUIRED FOR MOTIVATED UNDERGRADUATES CLEARED BY THE UPD WITH COMPSCI 490Q WITH A GRADE OF B OR BETTER, OR SUCCESSFUL COMPLETION OF ANOTHER COURSE AS NOTED ABOVE, IF AVAILABLE SEATS. IF YOU ARE UNCERTAIN WHETHER THIS COURSE IS A GOOD FIT FOR YOU, PLEASE CONTACT INSTRUCTOR. 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

- ELIGIBILITY: MS-CMPSCI GRADUATE STUDENTS ONLY.
- NOTES: 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. MS-CMPSCI STUDENTS ARE EMAILED INSTRUCTIONS ON HOW TO APPLY FOR CONSIDERATION.

COMPSCI 701
ADV TOPICS IN CMPSCI

- ELIGIBILITY: DOCTORAL, MASTERS GRADUATE CMPSCI STUDENTS ONLY.
- NOTES: 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 COMPLETED OVER TWO SEMESTERS WITH ENROLLMENT IN ONLY ONE SEMESTER. REQUEST OVERRIDE VIA THE SPECIAL ON-LINE FORM: https://www.cics.umass.edu/content/registration

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COMPSCI 701Y
ADV TOPICS IN CMPSCI (1ST SEM)

- ELIGIBILITY: DOCTORAL, MASTERS CMPSCI GRADUATE STUDENTS ONLY.
- NOTES: 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

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COMPSCI 791U
S-ADV TOPICS IN IR

James Allan, Hamed Zamani

- ELIGIBILITY: CMPSCI GRADUATE STUDENTS ONLY.
- NOTES: SECT 01=3 CR; SECT 02=1 CR. THE OPTION FOR 3 CREDITS INCLUDES A PROJECT WITH PERMISSION OF INSTRUCTOR. PARTICIPANTS WILL BE EXPECTED TO READ UP TO TWO PAPERS PER WEEK. ONE OR MORE ATTENDEES WILL BE RESPONSIBLE FOR PRESENTING A 10-15 MINUTE SUMMARY OF EACH PAPER AND HELP LEAD DISCUSSION OF THE PAPERS. WHEN POSSIBLE, RESEARCHERS WILL BE ASKED TO RELATE THEIR WORK TO THE PAPERS. A PREREQUISITE FOR THIS SEMINAR IS COMPSCI 646, THE INFORMATION RETRIEVAL COURSE, OR ITS EQUIVALENT. CONTACT HAMED ZAMANI (zamani@cs.umass.edu) OR JAMES ALLAN (allan@cs.umass.edu) IF YOU ARE UNCERTAIN WHETHER YOU HAVE THE NECESSARY BACKGROUND.

COMPSCI 879
TEACH ASSTS-TOMORROW'S FACULTY

Ivon Arroyo

- NOTES: 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.

	PREREQUISITES	ELIGIBILITY RESTRICTIONS	CLASS NOTES/COMMENTS *INFORMATION ONLY - DOES NOT AFFECT SPIRE ENROLLMENT.*
COMPSCI 891M S-THEORY OF COMPUTATION *Andrew McGregor*		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 ACHIEVED CANDIDACY. REQUEST ENROLLMENT VIA THE SPECIAL ON-LINE FORM: https://www.cics.umass.edu/content/registration
COMPSCI H250 HNRS COLLOQ: INTRO COMPUTATION *David Barrington*	*CICS 160 (PREVIOUSLY INFO 190T OR COMPSCI 187 OR E&C-ENG 241) 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*	*CICS 210 (OR 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 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 REQUEST OVERRIDE VIA ON-LINE FORM: https://www.cics.umass.edu/overrides.
COMPSCI H389 HNRS COLLOQ: INTRO TO ML *Philip Thomas*	*COMPSCI 220 (OR COMPSCI 230), COMPSCI 240 (OR STATISTC 515), AND MATH 233 ALL WITH A GRADE OF C OR BETTER [OR COMPSCI 389 WITH A GRADE OF B OR BETTER].*	JUNIOR AND SENIOR CS AND INFORM MAJORS IN COMMONWEALTH HONORS COLLEGE.	DEPARTMENT CONSENT REQUIRED. NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 389 (OR HAVE COMPLETED COMPSCI 389 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 *Parviz Kermani*	*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 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.
COMPSCI H589 HNRS COLLOQ: MACHINE LEARNING *Benjamin Marlin*	*[MATH 545 AND STATISTCS 315 (PREVIOUSLY 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 STATISTICS 315 (PREVIOUSLY 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.]* *OR [COMPSCI 589 WITH A B OR BETTER.]*	COMMONWEALTH HONORS COLLEGE JUNIOR AND SENIOR CS MAJORS ONLY.	DEPARTMENT CONSENT REQUIRED. INTERESTED STUDENTS MUST COMPLETE OVERRIDE REQUEST VIA ONLINE FORM. NO OPTION FOR PASS/FAIL. STUDENTS MUST BE ENROLLED IN COMPSCI 589 (OR HAVE COMPLETED COMPSCI 589 WITH A GRADE OF B OR BETTER). OVERRIDES VIA THE 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.
INFO 150 MATH FOUND-INFORMATICS *Mark Wilson*		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 AND NON-MATH/STATS UNDERGRADUATES WHO SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO THE WAITLIST AND SHOULD NOT REQUEST AN OVERRIDE. ANTICIPATED OPENING DURING THE FIRST WEEK OF CLASSES IN SPRING 2024. R1 MATH USEFUL; NOT ABSOLUTELY REQUIRED. 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 203 A NETWORKED WORLD *Mohammadhassan Hajiesmaili*		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 WHO SHOULD WAIT FOR THE ELIGIBILITY RESTRICTION TO BE REMOVED TO SELF-ENROLL OR ADD TO THE WAITLIST AND SHOULD NOT REQUEST AN OVERRIDE. ANTICIPATED OPENING DURING THE FIRST WEEK OF CLASSES IN SPRING 2024. 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*	CICS 110 (OR CICS 160 OR COMPSCI 119 OR COMPSCI 121) WITH A GRADE OF C OR BETTER, AND EITHER PSYCH 240, OIM 240, STATISTC 240, RES-ECON 212, SOCIOL 212, OR STATISTC 515 WITH A GRADE OF C OR BETTER.	INFORM MAJORS ONLY.	PREREQUISITE CHANGE APPROVED BY THE FACULTY SENATE, EFFECTIVE SPRING 2024, TO ALLOW ADDITIONAL PROGRAMMING COURSES. 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 (OR COMPSCI 240) WITH A C OR BETTER AND CICS 210 (OR COMPSCI 186 OR COMPSCI 187) WITH A C OR BETTER.	JUNIOR AND SENIOR CS AND INFORM MAJORS ONLY.	NO PASS/FAIL OPTION. SATISFIES INTEGRATIVE EXPERIENCE REQUIREMENT FOR CS AND INFORM MAJORS. ALSO SATISFIES A CS400 ELECTIVE FOR CS MAJORS. BEGINNING SPRING 2024, GRADES OF C OR BETTER ARE REQUIRED IN PREREQUISITES. WILL OPEN TO JUNIOR AND SENIOR CS MAJORS AFTER JUNIOR AND SENIOR INFORM MAJORS ARE GIVEN OPPORTUNITY TO ENROLL. ELIGIBLE CS MAJORS SHOULD NOT REQUEST AN OVERRIDE, BUT WAIT FOR ELIGIBILITY TO OPEN TO SELF-ENROLL. STUDENTS NEEDING SPECIAL PERMISSION MUST REQUEST OVERRIDES VIA THE ON-LINE FORM: https://www.cics.umass.edu/overrides.