

Cognitive Science Major Classes

KEY: ✓ track requirement

- one option of track requirement
- elective for track

*ULWR distinction depends on semester

**only students who are double majoring with another LSA major may be able to count CogSci courses toward their distribution. Please consult an advisor with questions.

***only required prerequisites are listed in this column, please consult the course guide for advisory prerequisites

COURSE INFORMATION				TRACK LIST					LSA REQ	DISTRIBUTION**	NOTES***
SUBJECT	#	SEC	TITLE	CRD	COMP	DEC	LANG	PHIL			
CPLXSYS	270		Agent-Based Modeling	3	<input type="checkbox"/>	<input type="checkbox"/>					
CPLXSYS	391		Modeling Political Processes	4		<input type="checkbox"/>			BS, QR/1		Cross-listed with POLSCI 391
CPLXSYS	501		Introduction to Complex Systems	3	<input type="checkbox"/>	<input type="checkbox"/>			Non-LSA crd		
CPLXSYS	511		Theory of Complex Systems	3	<input type="checkbox"/>	<input type="checkbox"/>			BS		
COGSCI	209		Language and the Human Mind	4	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>			Cross-listed with LING 209/PSYCH 242
COGSCI	301		Topics: Topics in Moral Psychology	3		<input type="checkbox"/>		<input type="checkbox"/>			
COGSCI	302		Topics in Moral Psychology			<input type="checkbox"/>		<input type="checkbox"/>			Cannot count for students who have taken COGSCI 301 section titled "Topics in Moral Psychology"
COGSCI	445		Machine Learning for NLP	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				Cross-listed with LING 445, prereq - EECS 281 (completed with a minimum grade of C- or better)
COGSCI	497		Directed Research for Cognitive Science	1-3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
COGSCI	498		Independent Study for Cognitive Science	1-3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
COGSCI	499		Senior Honors Research for Cog Sci	1-3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
ECON	395		MicroEcon Topics: Risk and Uncertainty	3		<input type="checkbox"/>					prereq - ECON 101 (C- or better)
ECON	398		Strategy	4	<input type="checkbox"/>	<input type="checkbox"/>			BS		
ECON	409		Game Theory	4		<input type="checkbox"/>			BS		prereq - ECON 401 (C- or better)
ECON	490		MicroEcon Topics: Behavioral Econ	3		<input type="checkbox"/>					prereq - ECON 401 (C- or better)
ECON	490		MicroEcon Topics: Ethics in Econ Behav	3		<input type="checkbox"/>			ULWR*		prereq - ECON 401 (C- or better)
EECS	281		Data Structures and Algorithms	4	<input checked="" type="checkbox"/>				BS		prereq - EECS 280 and EECS 203 or MATH 465 or 565 (C or better)
EECS	376		Foundations of Computer Science	4	<input type="checkbox"/>				BS		prereq - EECS 280 and EECS 203 or MATH 465 or 565 (C or better)
EECS	442		Computer Vision	4	<input type="checkbox"/>				BS		prereq - EECS 281 (C or better)
EECS	445		Introduction to Machine Learning	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>			BS		prereq - EECS 281 and Math 214 or 217 or 296 or 417 or 419 (C or better) prereq - EECS 281 (C or better); please consult CogSci enrollment guide for enrollment details
EECS	492		Introduction to Artificial Intelligence	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>			BS		
EECS	498		Special Topics: <i>Conversational Artificial Intelligence: Principles and Practice of Virtual Assistant AI</i>	4		<input type="checkbox"/>					
EECS	498		Special Topics: <i>Reinforcement Learning</i>	3-4	<input type="checkbox"/>				BS		
EECS	498		Special Topics: <i>Deep Learning</i>	3-4	<input type="checkbox"/>				BS		
EECS	595		Natural Language Processing	3	<input type="checkbox"/>		<input type="checkbox"/>		BS		Cross-listed with LING 541/SI 561
HISTORY	265		Minds and Brains in America	4				<input type="checkbox"/>			
IOE	536		Cognitive Ergonomics and Human Systems In	3	<input type="checkbox"/>	<input type="checkbox"/>			BS		non-LSA credit
LING	209		Language and the Human Mind	4	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>			Cross-listed with COGSCI 209/PSYCH 242
LING	313		Sound Patterns	3			<input checked="" type="checkbox"/>		ULWR*		
LING	315		Introduction to Syntax	3			<input checked="" type="checkbox"/>		ULWR*		
LING	316		Aspects of Meaning	3			<input checked="" type="checkbox"/>	<input type="checkbox"/>	ULWR*		
LING	342		Perspectives of Bilingualism	3			<input type="checkbox"/>				
LING	347		Talking Minds	3	<input type="checkbox"/>		<input checked="" type="checkbox"/>		BS		Cross-listed with PSYCH 349
LING	351		Second Language Acquisition	3			<input type="checkbox"/>		BS		Cross-listed with PSYCH 344
LING	352		Development of Language and Thought	3			<input type="checkbox"/>				Cross-listed with PSYCH 352
LING	394		Topics: Speech Errors	3		<input type="checkbox"/>					
LING	412		Speech Perception	3			<input type="checkbox"/>		BS		prereq - LING 313
LING	413		Speech Science	3			<input type="checkbox"/>				prereq - LING 313
LING	426		Philosophy & Linguistic Theory	3			<input checked="" type="checkbox"/>		ULWR*		Cross-listed with PHIL 426
LING	440		Language Learnability	3			<input type="checkbox"/>				prereq - LING 315
LING	441		Introduction to Computational Linguistics	3	<input type="checkbox"/>		<input type="checkbox"/>		BS		
LING	442		The Anatomy of Nat Lang	3	<input type="checkbox"/>		<input type="checkbox"/>				prereq - LING 441
LING	445		Machine Learning for NLP	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				Cross-listed with COGSCI 445, prereq - EECS 281 (completed with a minimum grade of C- or better)
LING	446		Comparative Linguistics	3			<input type="checkbox"/>				
LING	447		Psychology of Language	3	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	BS		prereq - PSYCH 240; Cross-listed with PSYCH 445
LING	492		Topics: Language Variation & Social Cog	3			<input type="checkbox"/>				
LING	492		Topics: Perspectives on Bilingualism	3			<input type="checkbox"/>				
LING	492		Topics: Intro to Neurolinguistics	3			<input type="checkbox"/>				
LING	492		Topics: Topics in Neurolinguistics	3			<input type="checkbox"/>				
LING	492		Topics: Sign Language Linguistics	3			<input type="checkbox"/>				
LING	492		Topics: Computation and Data Science for Lin	3	<input type="checkbox"/>		<input type="checkbox"/>				Cross-listed with LING 792
LING	497		Capstone: Speech Perception	3			<input type="checkbox"/>				prereq - LING 313
LING	541		Natural Language Processing	3	<input type="checkbox"/>		<input type="checkbox"/>		BS		Cross-listed with EECS 595/SI 561
MKT	313		Consumer Behavior	3		<input type="checkbox"/>			Non-LSA crd		please consult CogSci enrollment guide for enrollment instructions
MO	410		Designing for Collective Intelligence	3		<input type="checkbox"/>					Previously POLSCI 489 - topic titled Collective Intelligence
PHIL	303		Symbolic Logic	4	<input type="checkbox"/>			<input checked="" type="checkbox"/>	BS, QR/1		
PHIL	305		Introduction to Formal Philosophical Mthds	4				<input checked="" type="checkbox"/>	BS, QR/1		
PHIL	340		Minds and Machines	4	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>			
PHIL	345		Language and Mind	4			<input checked="" type="checkbox"/>	<input type="checkbox"/>			prereq - one PHIL course (C- or better)
PHIL	356		Issues in Bioethics	4			<input type="checkbox"/>				
PHIL	361		Ethics	4		<input checked="" type="checkbox"/>		<input type="checkbox"/>			prereq - one PHIL course (C- or better)
PHIL	381		Science and Objectivity	4			<input type="checkbox"/>				prereq - one PHIL course (C- or better)
PHIL	383		Knowledge and Reality	4	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	RE		prereq - one PHIL course (C- or better)
PHIL	384		Applied Epistemology	4		<input type="checkbox"/>		<input type="checkbox"/>			
PHIL	409		Philosophy of Language	2-3			<input checked="" type="checkbox"/>	<input type="checkbox"/>			last taught in Fall 2013
PHIL	413		Formal Philosophical Methods	3				<input checked="" type="checkbox"/>	BS		
PHIL	414		Mathematical Logic	3	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	BS, QR/1		
PHIL	426		Philosophy & Linguistic Theory	3			<input checked="" type="checkbox"/>		ULWR*		Cross-listed with LING 426
PHIL	429		Ethical Analysis	3		<input type="checkbox"/>					PHIL 361 or 366 or 367 or PPE 300 (C- or better)
PHIL	443		Foundations of Rational Choice Theory	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>			
PHIL	444		Groups & Choices	4		<input checked="" type="checkbox"/>		<input type="checkbox"/>			
PHIL	446		Social and Political Philosophy of Lang	3			<input type="checkbox"/>	<input type="checkbox"/>	ULWR*		prereq - one PHIL course; last taught in Winter 2017

PHIL	450	Philosophy of Cognition	3	○			○			
PHIL	482	Philosophy of Mind	3	○		○	☒○			
PHIL	485	Philosophy of Action	3		○		○			last taught in Fall 2015
POLSCI	391	Modeling Political Processes	4		○				BS, QR/1	Cross-listed with CMLXSYS 391
POLSCI	489	Advanced Topics: Collective Intelligence	3		○					
POLSCI	490	Game Theory and Formal Models	4		○					
PPE	300	Introduction to Political Economy	4		○					
PSYCH	240	Introduction to Cognitive Psychology	4	☒○	○	○	☒○	BS		prereq - PSYCH 111, 112, 114, 115, or 116
PSYCH	242	Language and the Human Mind	4	○		☒○	○			Cross-listed with COGSCI 209/LING 209
PSYCH	303	Research Methods in Psychology	3	○	○	○	○	BS, ULWR*		prereq STATS 250, STATS 280, STATS 425, or MATH 425; and one of PSYCH 230, 240, 250, 260, 270, 280, or 290; can only count one of PSYCH 302, 303, 331, or 341 toward CogSci degree
PSYCH	314	Positive Psychology	3		○					prereq - PSYCH 111 or 112 or 114
PSYCH	330	Topics: Human Cognitive Evolution	3	○	○	○	○	BS		prereq - PSYCH 230
PSYCH	335	Introduction to Animal Behavior	4		○			BS		prereq - PSYCH 111, 112, 114, or 115 OR BIO 162, 163, 171, 172, or 195 OR ANTHRBIO 161
PSYCH	343	Cognitive Neuroscience of Learning and Mem	3		○			BS		prereq - PSYCH 230 or 240
PSYCH	344	Second Language Acquisition	3			○		BS		Cross-listed with LING 351
PSYCH	345	Introduction to Human Neuropsychology	4	☒○	○		☒○	BS		prereq - PSYCH 111, 112, 114, 115, or 116
PSYCH	346	Learning and Memory	3	○	○		○	BS		prereq - PSYCH 240 or 345
PSYCH	347	Perception	3	○			○	BS		prereq - PSYCH 230, 240, or 345
PSYCH	348	Psychology of Thinking	3	○	○		○	BS		prereq - PSYCH 240
PSYCH	349	Talking Minds	3	○		☒○		BS		Cross-listed with LING 347
PSYCH	352	Development of Language and Thought	3			○				Cross-listed with LING 352
PSYCH	355	Cognitive Development	3	○				BS		
PSYCH	360	Behavior and Environment	3		○			SS		Cross-listed with EAS 560/ ENVIRON 360/SW 710/ URP 544
PSYCH	389	Psychology & Law	3		○					prereq - PSYCH 111, 112, 114, 115, or 116
PSYCH	401	Special Topics: The Science of Happiness	3		○		○			prereq - PSYCH 111, 112, 114, or 115 no credit for students who have previously taken PSYCH 314 or PSYCH 476
PSYCH	402	Problems in Psych: Compassionate Brain	3		○					prereq - PSYCH 111, 112, 114, or 115
PSYCH	402	Problems in Psych: Decision Making IRL	3		○					prereq - PSYCH 111, 112, 114, or 115
PSYCH	440	Advanced Topics: Learning and Memory	3		○		○	BS		prereq - PSYCH 240
PSYCH	443	Creativity	3		○			BS		prereq - PSYCH 240
PSYCH	445	Psychology of Language	3	○	○	○	○	BS		prereq - PSYCH 240; Cross-listed with LING 447
PSYCH	446	Altruism	3		○		○	BS		prereq - PSYCH 240
PSYCH	447	Topics: Consciousness and Cognition	3				○	BS, ULWR*		prereq - PSYCH 230, 240, or 345
PSYCH	447	Topics: Analyzing Language Usage...	3				○	BS		prereq - PSYCH 230, 240, or 345
PSYCH	448	Mathematical Psychology	3	○	○	○	○	BS, QR/2		prereq - sophomore standing or above AND two MATH courses except MATH 105, 110, 127, or 128 OR two STATS courses 200-level or above
PSYCH	449	Decision Processes	3			✓		BS		
PSYCH	487	Topics: Intelligence, Foolishness, & SIFCntrl	3		○					prereq - PSYCH 111, 112, 114, or 115
PSYCH	644	Computational Modeling of Cognition	3	○				BS		
SI	388	Putting the H in HCI: Human Perception, Cogn	4	○	○					please consult CogSci enrollment guide for enrollment instructions
SI	422	Needs Assessment and Usability Eval	3	○						please consult CogSci enrollment guide for enrollment instructions
SI	561	Natural Language Processing	3	○			○	BS		Cross-listed with EECS 595/LING 541

Check this list to see courses that have previously been approved to count for CogSci through the course petition process:

<http://myumi.ch/BoZY7>