

Tentative Course Calendar (18-743 Spring 2023):

Week	Date	Day	Class Activity	
Week 1	17-Jan	Tues	Lecture 1: Course Overview: "What is this course all about?"	JPS
	19-Jan	Thurs	Lecture 2: Introduction and Background	JES
Week 2	24-Jan	Tues	Recitation 1 : Tutorial on PyTorch Simulation (C3S-Sim) (Lab 1 out)	HN
	26-Jan	Thurs	Lecture 3: Online Clustering – Part 1	JES
Week 3	31-Jan	Tues	Lecture 4: Online Clustering – Part 2	JES
	2-Feb	Thurs	Lecture 5: Cortical Columns Computing Systems (C3S)	JPS
(Lab 1)	7-Feb	Tues	Recitation 2 : Tutorial on Verilog Design (C3S-Syn) (Lab 2 out)	PV
Week 4	9-Feb	Thurs	Lecture 6: AKIDA Neuromorphic SoC [Kris Carlson, Brainchip]	KC
Week 5	14-Feb	Tues	Lecture 7: AKIDA MetaTF Tools & HDK [Nikunj Kotecha, Brainchip]	NK
	16-Feb	Thurs	Recitation 3 : Past & Potential Project Proposals (start forming teams)	TAs
(Lab 2)	21-Feb	Tues	Lecture 8: Reinforcement Learning	JES
Week 6	23-Feb	Thurs	Recitation 4 : Discussion on Specific Team Projects (teams finalized)	TAs
Week 7	28-Feb	Tues	Research Project Proposals #1 (20-25 min per team)	
	2-Mar	Thurs	Research Project Proposals #2 (20-25 min per team)	
	6-Mar – 10-Mar		SPRING BREAK; NO CLASSES	
Week 8	14-Mar	Tues	Lecture 9: Macro-Column Architecture – Part 1	JES
	16-Mar	Thurs	Lecture 10: Macro-Column Architecture – Part 2	JES
Week 9	21-Mar	Tues	Lecture 11: Thousand Brain Theory: Cortical Columns [Numenta]	
	23-Mar	Thurs	Recitation 5 : Project discussions & guidance	TAs
Week 10	28-Mar	Tues	Research Project Updates #1 (20-25 min per team)	
	30-Mar	Thurs	Research Project Updates #2 (20-25 min per team)	
Week 11	4-Apr	Tues	Lecture 12: a. Neuromorphic Architecture; b. Beamforming Killer App	JES HN
	6-Apr	Thurs	Lecture 13: Survey of Neuromorphic Circuits [Quinn Jacobson]	QJ
Week 12	11-Apr	Tues	Recitation 6 : Project discussion & guidance	TAs
	13-Apr	Thurs	(No Class) – Spring Carnival	
Week 13	18-Apr	Tues	Lecture 14: Neuromorphic: Industry Landscape - Personal Perspective	JPS
	20-Apr	Thurs	Research Project Presentations #1 (30-35 min per team)	
Week 14	25-Apr	Tues	Research Project Presentations #2 (30-35 min per team)	
	27-Apr	Thurs	Research Project Presentations #3 (30-35 min per team)	
Week 15	2-May	Tues		
	8-May	Mon	Research Project Reports Due	