Cogs 102A SSII 2018 **DISTRIBUTED COGNITION** MW 11-3 Mande B150

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See Course Website at http://pages.ucsd.edu/~johnson/COGS102A/ for Readings, Lecture & Lab notes, Videos, and more!

Attendance at all LABS and all Sections (M&W 2-3 in Mande B150) is REQUIRED

Week	d Dat	tes	Part I	Part II	Reading
1	Mon	8/6	Cognitive Ecology	LAB 1: NetLogo ANTS	Hutchins 2010a
	Wed	8/8	Using Space	LAB 2: Ecological Invariants	Kirsh 12009
2	Mon	8/13	Cognitive Artifacts & Epistemic Practice	LAB 3 : Designing Cognition	Norman 1994 Hutchins 2010b
	Wed	8/15	Cognitive Ethnography	DISC : Developing a Protocol	Williams 2006
3	Mon	8/20	Midterm Exam 1	Ontogeny of Triadic Attention	de Barbaro, Johnson & Deák 2013
	Wed	8/22	Cognitive Development	LAB 4: Scaffolding	Yu, Smith & Pereira 2008
4	Mon	8/27	Attribution & Behavior	LAB 5: Twilight Gaze	Johnson 2002
	Wed	8/29	Discourse Analysis	LAB 6: Laminar Semiotics	Goodwin 2013
5	Mon	9/3	NO CLASS - HOLIDAY		
	Wed	9/5	Midterm Exam 2	Final Lab Project: LAB 7: Designing Research on Collaboration	Heath & Hindmarsh 2000 on

Final Lab Project: Complete & submit Lab 7 in class at "Final" Friday, 7 Sept, 11:30-2:30

COURSE REQUIREMENTS

6 Labs: 100 pts each = 600 pts Final Lab Project = 200 Pts Midterm Exams = 250 Pts each

Exams will cover material from Lectures, Labs, and Readings.

Reading prompts are provided for all readings. Exam questions on readings will be based on prompts. Within-team evaluations of Labs will also be required, and will impact 25% of Lab Score

<u>Labs</u> will be done in <u>teams of 4</u> students (set up in *Lab 1*), who will submit one report per team per lab. <u>Lab Reports – provided at each lab - are due at end of lab.</u>

Each team member will need to SIGN lab report. Each lab will require ~ <u>2.5 hours</u> to complete. Most labs will require at least one laptop per team.

Many labs require frame-by-frame viewing of videos. Most videos provided on website (except Lab 6)

Required Readings

On Midterm 1

Hutchins, E. (2010a). Cognitive Ecology. Topics in Cognitive Science, 2: 705-715.

Kirsh, D. (2009). Interaction, external representation and sense making. 31st Annual Conf of Cognitive Science Society.

Norman (1994). Things that make us smart. Chapt 3: The Power or Representation. NY: Perseus Books

Hutchins, E. (2010b) Enaction, imagination & insight. In J. Steward, O. Gapenne & E. A. Di Paolo (Eds) *Enaction: Toward a New Paradigm for Cognitive Science*. pp: 387-424, MIT Press.

Williams, R.F. (2006). Using cognitive ethnography to study instruction. *Prodeedings of the 7th International Conference of the Learning Sciences*. Mahway, NJ: Lawrence Erlbaum Associates.

On Midterm 2

deBarbaro, K., Johnson, C.M.& Deak, G.O. (2013). Twelve month "social revolution" emerges from mother-infant sensorimotor coordination: A longitudinal study. *Human Development 56*: 223-248. DOI: 10.1159/000351313

Yu, C., Smith, L. B. & Pereira, A. F. (2008). Grounding word learning in multimodal sensorimotor interaction. In B. C. Love, K. McRae, & V. M. Sloutsky (Eds.) *Proceedings of the 30th Annual Conference of the Cognitive Science Society (pp. 1017-1022)*. Austin, TX: Cognitive Science Society.

Johnson, C.M. (2002). The Vygotskian advantage in cognitive modeling: Participation precedes and thus prefigures understanding. *Behavioral & Brain Sciences*, 25: 628-629.

Goodwin, C. (2013). The cooperative, transformative organization of human action & knowledge. J. of Pragmatics 46: 8-23.

For Final Project

Heath, C. & Hindmarsh (2000). Configuring action in objects: From mutual space to media space. In *Mind*, *Culture and Activity*, 7, 81-104.

