

Spring 2017
Cognition, Collaboration, & Technology
15:262:622:01
3 Credits
Thursdays, 4:30pm – 7:30 pm

Instructor Name: Janice Gobert	Email address: janice.gobert@gse.rutgers.edu
Phone Number: 848-932-0867	10 Seminary Place, Room 350
Office Hours: By appointment	Prerequisites or other limitations: none
Mode of Instruction: <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Seminar <input type="checkbox"/> Hybrid <input type="checkbox"/> Online <input type="checkbox"/> Other	Permission required: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Directions about where to get permission numbers:

Course catalog description & Learning goals:

This course reviews selected topics in the study of Cognition, Collaboration, and Technology and their implications for design and for learning.

1. To become familiar with key theoretical frameworks relevant to the Design of Digital Learning Environments.
2. To understand how key theoretical frameworks prescribe design decisions.
3. To review current Educational Learning environments and align these to theoretical frameworks and their respective design decisions.

Class materials/Textbooks:

Selections from:

Sawyer, K. (2014). *The Cambridge handbook of the learning sciences* (2nd ed). New York: Cambridge University Press.

Other manuscripts, distributed in class or via site/email

Grading:

40% - Final Exam (Take home)

10% - Weekly discussion questions

50% - Presentation & write up of presentation

Course web site:

There is a web site for the course implemented in the course system. The web site will be used to post the course syllabus, assignments, lecture notes, and other course documents, to make announcements, to post grades, and to create a discussion board where students can look post their comments & questions, and discuss various aspects of the course.

Weekly questions:

Students are to come to class having READ the required material. Before every class (Wednesday 1 pm), you will be expected to submit at least 3 questions that came up during the readings. These questions will help guide the discussions in class to address themes across the papers. Students should try to synthesize and integrate knowledge in order to demonstrate that you are knowledge producers and not merely knowledge consumers. Comments posted will be evaluated with that (knowledge production versus knowledge consumption) as a guiding parameter.

Presentation & write up:

Students will review 2 Educational Learning Environments (ELEs) that are thematically related and present these to the class. ELEs are to be chosen in collaboration with Dr. Gobert. Guidance will be given about HOW to review these.

Exam:

The exam will cover all material from the class readings *and* discussions in class. Questions will be short answer format.

Academic Integrity Policy:

The Office of Student Conduct supervises issues related to violations of academic integrity

(see <http://academicintegrity.rutgers.edu>). Please familiarize yourself with the university policy on academic integrity at http://academicintegrity.rutgers.edu/files/documents/AI_Policy_2013.pdf

Office of Disability Services:

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Week	Date	Description	HPL	HLS, 1st Ed.	HLS, 2nd ed	Others (TBD)
1	01/19/17	introduction to course, readings, expectations, me, students	none	none	none	
2	01/26/17	BIG Picture	Ch. 1		Ch. 2	
3	02/02/17	Foundations: Constructionism		Ch. 3		Blikstein & Wilensky (in Jacobson & Reimann)
4	02/09/17	Foundations: Knowledge Building by Scardamalia & Bereiter			Ch. 20	Scardamalia Collective Cognitive Responsibility
5	02/16/17	Knowledge Forum cont'd				
6	02/23/17	Foundations: Apprenticeship & Learning in Activity			Ch. 6 & 7	CTGV: Vyet et al, 1997; Dede et al EcoMuve
7	03/02/17	Foundations: Intelligent Tutoring		Ch. 5		Gobert in Rupp
8	03/09/17	Review of Group presentation progress			Ch. 12	ECD by Mislevy; JEDM by Gobert et al
9	03/16/17	No class; spring recess				
10	03/23/17	Foundations: Assessment & Analytic				
	03/30/17	no class; group work towards				
11	04/06/17	Metacognition			Ch. 4	
12		cutting edge tech: sidney d'melo, roger azevedo, bev woolf/ivon arroyo, gsr, eye				
13	04/13/17	Engagement				Gobert et al 2015; White et al
14	04/20/17	Tech demos				
15	04/27/17	Tech demos				
16	05/04/17	student presentations X 3 group TECH demos; choose from: Technologies: NetLogo; Genscope Technologies: WISE; Knowledge Forum; Technologies: Inq-ITS; Thinker Tools Technologies: EcoMuve; Room Quake; Quest Atlantis Technologies: Wayang Outpost; Invention Lab; Model IT				