

# ITLS 6870: Embodiment, Communication, and Technology

Spring 2014, Online only

<http://canvas.usu.edu>

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## Course Description

We all have bodies, but what are they good for? This special topics seminar will examine that question and explore three answers: (1) bodies are important for how we think and learn, (2) they are important for how we teach, communicate, and lead, and (3) they are becoming increasingly important for how we use and interact with new technologies. Over the semester, we will explore and read research about embodied cognition, gesture, eye gaze, facial expression, and body language. We will learn about cutting edge technologies that are being designed for both increased productivity and for new ways of learning complex ideas that rely upon the body in order to work. Students will come away with a better understanding of current research involving the body as a tool for thought, communication, and technology and with some tools for improving how they communicate with others.

## Course Objectives

Through active and consistent participation in this course, it is expected that students will be:

- **Gaining factual knowledge (terminology, classifications, methods, trends)**
  - Students will **learn and be able to explain theories of embodiment and identify ways in which our thinking is influenced by the body.**
- **Learning fundamental principles, generalizations, or theories**
  - Students will be able to **describe new emerging technologies** that involve the body and discuss some of the interactional and learning possibilities associated with them.
  - Students are able to **describe specific ways (e.g., eye gaze, mimicry, gesture) in which the body is used to support communication.**

## Required textbooks and materials

Most readings will be made available to you electronically through the USU Library online course reserves (<https://eres.usu.edu/eres/courseindex.aspx?page=search>). There is one textbook that you can purchase through the USU Campus store or online.

Goman, C. K. (2011). *The Silent Language of Leaders: How Body Language Can Help--or Hurt--How You Lead*. San Francisco, CA: Jossey-Bass.

This text is not needed until the second half of the term, so feel free to shop around for the best price. Copies of relevant chapters will also be made available through online course reserves.

## Course Format

This course is a graduate level seminar that will be conducted online only. Traditionally, graduate seminars are organized as face-to-face roundtable discussions where each student takes a turn presenting and leading the class in a dialogue around reading material for the week. The seminar typically culminates in a term paper related to the topic of the seminar. Given the online format and the mixed backgrounds of the students with respect to this model, we will do the following:

Each week, a member of the class (either the instructor or a pair of students) will prepare a short presentation to be posted online to help summarize the readings for the week. Then everyone will be responsible for actively participating in the subsequent online discussion during the week. Some weeks may involve simply discussing the readings and questions as they are posed. Other weeks may ask you to try something new and report back to the rest of the class and discuss.

**Please note: This course is not modeled as having some predefined content that will be delivered by the instructor. Rather, it is joint knowledge building through discussion. You *must* do the assigned readings, critically reflect on both them and the ongoing online dialogue, and actively participate in the discussions to be successful.**

In lieu of a term paper traditionally associated with a graduate seminar, we will also do three short projects throughout the semester.

## Course Requirements

Everyone will be involved in preparing a summary presentation of the readings and is expected to participate actively in online class discussions. Your course grade will be determined by the following:

### **Online Presentations (30% of course grade)**

At least twice during the term, you should expect to be paired with another student in the class and prepare an online presentation summarizing the week's readings for the rest of the class. The presentation must be posted on the Tuesday of the week of the current unit. Your presentation will be evaluated based on how accurately you summarize the week's readings, how concisely you hit upon the main points, and how clear and approachable you are in your presentation.

Presentations should take the form of presentation documents (e.g., a powerpoint file or an interactive document through Prezi) or a short video or audio recording (e.g., a podcast). Audio annotation of presentation documents is welcome, but not required.

You are welcome and encouraged to contact the instructor prior to your presentation to receive feedback on initial versions of your presentation.

### **Active and High Quality Weekly Discussion Participation (40% of course grade)**

Each week, you are to meaningfully participate in the online discussions. Through your posts, it should be evident that you both completed the readings, reviewed the summary materials prepared by others in the course, and that you are genuinely engaging with the current content of the discussion board. To ensure participation, you will receive a grade for your online participation each week. In light of the fact that things inevitably come up that prevent us from doing our best every week, your bottom two grades for discussion participation will be dropped. There is no hard and fast rule for what constitutes high quality and appropriate quantity, but you should aim for a minimum of at least two separate posts of roughly a paragraph in length each week or the equivalent. If you are presenting that week, your presentation will also count toward as one post in your two post minimum.

## **Unit Assignments (total of 30% of course grade, each worth 10%)**

### **Conceptual Metaphor Assignment**

In consideration of the importance of conceptual metaphor to theories of embodied cognition, you will be asked to complete one assignment in which you identify one conceptual metaphor encountered in 'everyday life', analyze its bodily basis, describe its use and conceptual entailments, propose an alternative metaphor, and discuss the implications of the alternative.

### **A body communication log**

For an entire day, you will be asked to maintain a log of some set of bodily communications observed from your everyday life. This set of bodily communications could include eye gaze, gesture, mirroring, etc. For each entry, you are to write a brief commentary about why you think that bodily activity was enacted at that moment (e.g., was it complementary information to speech? Was it to use the environment for a situated reference? Was it a bid to speak?). For an additional day, you are to attempt a conscious manipulation of that aspect of your own communication and discuss if and how you think your interactions changed as a result. A log of the manipulation day (minimum of 8 entries) also needs to be submitted.

### **A self experiment**

You will design and execute a “self experiment” and prepare a presentation of the self-experiment and a reflection of what, if anything, you learned in the process. For example, you might analyze how active you are during the work day, how much time you spend in transit, your quality of sleep, your caloric intake, your exercise habits, your weight over time, your mundane habits, etc. A proposal must be submitted and approved for the self-experiment. You may wish to obtain some new technology (a separate device or a mobile app) or you can do this manually in a low-tech way without any additional cost.

## Course Schedule

Date	Topic	Readings	Due Dates
<b>Foundations for Embodiment</b>			
Week 1: January 7	Disembodied Cognition	Gardner (1985), Selections	
Week 2: January 14	Embodiment and Metaphor	McNerney (2011) Lakoff & Johnson (1980)	
Week 3: January 21	Modal cognition, Emotion embodied	Barsalou, Simmons, Barbey, & Wilson (2003) Neidenthal (2007)	
Week 4: January 28	Indexicality	Glenberg & Kaschak (2002) Glenberg, Gutierrez, Levin, Japuntich, & Kaschak (2004)	
Week 5: February 4	Empirical studies of embodiment	Pick one: Alibali & Nathan (2012) Miles, Nind, & Macrae (2010) Schubert & Koole (2009) Nunez & Sweetser (2010) (PhD level)	First Student presentations
<b>Communication and the body</b>			
Week 6: February 11	Embodiment through gesture	Goldin-Meadow (1999) Kirsh (2010)	
Week 7: February 18		No class "meeting"	Metaphors assignment due
Week 8: February 25	Gesture in communication	McNeill (1992) Ch 1 Cassell, Kopp, Tepper, Ferriman, & Striegnitz (2007)	
Week 9: March 4	Using the body to communicate (part 1)	Lakin & Chartrand (2003) Ekman (1993) Goman (2011) Ch 4	
Week 10: March 11	SPRING BREAK		
Week 11: March 18	Using the body to communicate (part 2)	Goodwin (1980) Goman (2011) Ch 2	
<b>Technology and the body</b>			
Week 12: March 25	Wearable sensors	Lee (2013) Lee & Drake (2013)	Body activity log due

Week 13: April 1	Tabletop and gesture interfaces	Antle, Bevans, Tanenbaum, Seaborn, & Wang (2011) Horn, Leong, Block, Diamond, et al. (2012) Howison, Trninic, Reinholz, & Abrahamson (2011)	
Week 14: April 8	Full Body interfaces	Tscholl, Lindgren, & Johnson (2013) Lindgren & Johnson-Glenberg (2013) SmallLabs thing	
Week 15: April 15	Body, place, and technology	Taylor & Hall (2013) Rogers, Price, Randell, Fraser, et al. (2005)	
Week 16: April 22	Self Experiment presentations		Self Experiments due
Week 17: April 29	FINALS WEEK – NO CLASS MEETING		

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