

Advanced Topics in Psychology: Social Identity in Development

PSYC258 | Spring 2021

Course Description:

What do we know? And how do we know what we know? Among other questions, developmental psychologists examine what knowledge we are born with and what we must learn. In this class, we will examine the theories attempting to understand conceptual development as well as applications of these theories to child development, artificial intelligence, and other areas.

Contact Information:



Instructor: Dr. Amanda Woodward

Pronouns: She/Her/Hers Email: amanda.woodward@ucr.edu

Office Hours: Monday 1-2pm or by appointment

Office Zoom Room: <https://ucr.zoom.us/my/amandamaewoodward>

Course Information:

Monday 2-4:50pm Zoom Link:

<https://ucr.zoom.us/j/99422688426?pwd=a2cxL0VnQVVPbVIHcXRdZlJkK1hBUT09>

Course Objectives:

By the end of this course, students should be able to:

- ◆ Describe different theories of conceptual development
- ◆ Apply theories of conceptual development to AI
- ◆ Articulate the role of innate and learned knowledge in conceptual development



Course Materials:

In this course, we will read scientific articles and chapters concerning conceptual development. These materials will be posted on Canvas at least one week in advance.

Course Requirements:

Discussion Posts:

Each week, you will be expected to post one discussion post in a 3-2-1 format (3 things you learned, 2 things you'd like to know more about, and 1 question you have). You should also reply to one of your classmate's discussion posts. These are meant to help you think about the material before our discussion and can be written as bullet points or paragraphs. Feel free to bring in any additional information you see fit.

Leading Discussion:

I will ask that each student takes a turn leading discussion in the class. Your role will be to facilitate conversation and may include posing questions to the group, probing other students' discussion board posts, and/or speculating about applications of these theories.

Course Schedule:

Week 1: Introduction to the Course

In today's class, we'll discuss the format of the class, sign up for discussion weeks, and begin to discuss topics for later weeks. I'll lead a short discussion on conceptual development, applications I know of, and what you can expect in later weeks.

Readings: N/A

Week 2: Introduction to Core Knowledge

Kinzler, K. D., & Spelke, E. S. (2007). Core systems in human cognition. *Progress in brain research*, 164, 257-264.

VIDEO: <https://www.youtube.com/watch?v=u4jUxjf0bAY>

Ullman, T., Tenenbaum, J., Goodman, N., Ullman, S., & Spelke, E. (2013). Minimal Nativism: How does cognitive development get off the ground?. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 35, No. 35).

Week 3: Objects

Spelke, E. S. (1990). Principles of object perception. *Cognitive science*, 14(1), 29-56

Hespos, S. J., & VanMarle, K. (2012). Physics for infants: Characterizing the origins of knowledge about objects, substances, and number. *Wiley Interdisciplinary Reviews: Cognitive Science*, 3(1), 19-27.

Week 4: Number

Spelke, Elizabeth S. "Core knowledge, language, and number." *Language Learning and Development* 13.2 (2017): 147-170.

Izard, V., Sann, C., Spelke, E. S., & Streri, A. (2009). Newborn infants perceive abstract numbers. *Proceedings of the National Academy of Sciences*, 106(25), 10382.

Week 5: Agents

Spelke, E. S. (2016). Core knowledge and conceptual change. *Core knowledge and conceptual change*, 279, 279-300.

Sommerville, J. A., Woodward, A. L., & Needham, A. (2005). Action experience alters 3-month-old infants' perception of others' actions. *Cognition*, 96(1), B1-11.

Liu, S., Brooks, N. B., & Spelke, E. S. (2019). Origins of the concepts cause, cost, and goal in prereaching infants. *Proceedings of the National Academy of Sciences*, 116(36), 17747-17752.

Week 6: Social Beings/ Person (Social Relationships)

Spokes, A. C., & Spelke, E. S. (2017). The cradle of social knowledge: Infants' reasoning about caregiving and affiliation. *Cognition*, 159, 102-116.

Week 7: Geometric Forms

Spelke, E., Lee, S. A., & Izard, V. (2010). Beyond core knowledge: Natural geometry. *Cognitive science*, 34(5), 863-884.

Week 8: Places: Kasey

VIDEO: <https://www.youtube.com/watch?v=r-F8Dlp-POk>

Lee, S. A., & Spelke, E. S. (2010). Two systems of spatial representation underlying navigation. *Experimental brain research*, 206(2), 179–188. <https://doi.org/10.1007/s00221-010-2349-5>

Week 9: AI or Student Choice

<http://www.mindsvsmachines.com>

Each student will choose one video to present to the class and lead discussion on.

Week 10:

Memorial Day Weekend: No Class