General Structure of the Course

The course will be divided into two modules, each comprising 6 weeks of the class.

In the rst module, we will learn how researchers conceptualize theory of mind, and the developmental trajectory of theory of mind concepts in young children. In each case, we will gain exposure to important general issues that face developmental psychologists, such problems of interpreting children's behaviour in experimental tasks, characterizing theoretical mechanisms of development, and understanding the interplay between biology and experience in shaping development.

For each class during this module, we will have a reading or two that students will be expected to have read in advance and composed a short, informal "reaction" thought for (see attached). I will make a brief presentation on the article, highlighting what I think are key points. After about 20 minutes, we will then turn to a discussion phase. For the rst 30 minutes of the discussion phase, students will spend time in groups discussing the questions and "reactions" that each student brought along. For the second 30 minutes, I will ask a spokesperson for the group (a di erent one each day) to share back with the class something that emerged from the discussion as particularly interesting, puzzling, or noteworthy.

At the end of week 4, I will assign four essay questions related to the material that is covered in the rst module. Responses to these essay questions will be due on the rst day of week 7.

Assessment for Module 1 will be made as follows:

35% — Reading response papers

25% — Discussion participation

45% — Essay Questions

In the second module, we will build on the basics acquired in the rst module to explore how a theory of mind perspective can help us to understand children's developing abilities to negotiate a host of everyday social challenges.

To achieve these goals, students will work throughout the module in a group. Each group will tackle one of six challenges and be responsible for three main goals — a) conceptualizing through how a theory of mind perspective on the challenge might be useful, b) nding and reviewing the extant literature that may speak to whether theory of mind skills are related

to the challenge, and c) identifying future directions for research on the topic.

The ultimate product for the group will be to co-author a review article like those that are published in a general psychology journal called *Trends in Cognitive Sciences*. There are many examples of what these kinds of papers can look like and I will go over one in detail for the class. Typically, *TiCS* papers comprise approximately a 3000 word organized essay review that is accompanied by gures and "boxes" that provide succinct summaries of research paradigms, a general pattern of research indings, or a special cultural study's worth of data from a paper that might be particularly illustrative of a particular phenomenon. The reason for choosing this format in particular it is a exible one with many options for creatively and clearly communicating important information to a broad population.

In the rst two weeks (7 & 8), we will take class time for group work to conceptualize the paper. The goal is that by the end of these rst two weeks, groups will submit to me a basic outline for their review papers, and a detailed plan for how the work will be divided evenly among the members of the group.

In the next week (9), I will ask each group to make a 25 minute informal presentation to the class that describes their challenge, why a theory of mind approach might be interesting, and then sketches out the broad topics that they will be researching. In essence, this should be a relatively detailed presentation of the introductory material for the paper, but then only an outline of the "research" that they will be doing for their paper. The purpose of this presentation is twofold. First is to encourage all groups to crystallize the conceptualization of their papers to the extent that they can communicate clearly to the group. Second is to communicate material that a given group is working on to the rest of the students in the course. Of course, I expect that during these weeks students will continue working on their research and writing outside of class hours.

In week 10 and then part of week 11, we will have more time for group work. It is my hope that members of the group will have rough drafts of their contributions to the *TiCS* article and will thus have the opportunity to get constructive feedback on the ideas and writing from their other group members. By the end of this period, the article should have its basic form, even if it's rough.

At the end of week 11 and for all of week 12, we will have two groups make presentations to communicate the results of their research. This presentation should only remind the class of the introductory material but delve more deeply into the research that they have done. As with the rst presentations, the purpose is to encourage groups to make progress toward

their goals while communicating material to the rest of the students in the course. Presentations can be up to 40 minutes long each (inclusive of discussion time), and we will leave some time at the end for the rest of the students in the course to evaluate what they have learned.

Each group's review paper will be due on the Monday Dec 1, which is the rst Monday after classes o cial end. Only one paper will be submitted along with a detailed description of the work that each person in the group did, agreed upon and attested by each member of the group.

Special notes about group work

I realize that group work poses many challenges as students with dierent motivations, backgrounds, and talents are asked to work together toward a common goal. Some of the challenges are similar to those that are faced in real-world productive environments, academic or otherwise. I expect that each group will have some of these sorts of everyday challenges and will organize themselves to negotiate them successfully. I will do my best facilitate that process, but would like to emphasize some ground rules that may help folks get o on the right foot.

One of the biggest challenges of working in a group is when someone has an idea or a suggestion that another in the group is critical of. These situations inevitably arise and when they do, two things are important.

- 1. The one who is being critical must phrase their comments in terms of the idea, and not the person.
- 2. Given that criticisms are not intended as judgments on the person, it is important not to take them as such.
- 3. Speci c criticisms of ideas are clear, constructive and emphasize that everyone is working toward a common goal. Non-speci c criticisms feel unprincipled, ad hoc, and are more easily taken personally. For instance, try not to say "This doesn't make sense to me." Instead, try to say "I am not sure I understood what you were getting at here, because..." Speci c criticisms invite discussion whereas non-speci c ones shut it down.
- 4. Win some, lose some: As decisions are being made about how the article is shaping up, hard feelings can develop if it seems that there are one or two group members who are most likely to have their suggestions followed. To avoid this, group members should stake out limited sections in which they will have nal say, and limit themselves to a generous advisory role on the rest of the sections.

The second biggest challenge of working in a group is ensuring that everyone does equal work to the best of their ability. I hope it does not sound too cynical to say that I doubt that it is possible to meet this challenge to full satisfaction. For this reason I will be putting in place two mechanisms for ensuring that no group members su er because of a colleague's insu cient e orts.

- 1. At the end of every class period in which group work is scheduled, I will come around toward the the end and determine that there is a clear, mutually agreed upon plan for all group members in terms of what they are expected to do to facilitate progress in the group. I will write these expectations down and present them at the beginning of the next group session.
- 2. I will regularly ask students to con dentially rate the extent to which group members are contributing to the progress of the project. These will be done on standardized rating forms that I will hand out at di erent phases of the group work project.
- 3. Grades for the group work portion will be based upon the

Schedule of Class Topics and Readings

Tuesday, Sept. 9: Introduction to the class, sign ups

Thursday, Sept. 11: "Social" cognition in the wild

Dally, J. M., Emery, N. J. & Clayton, N. S. (2006). Food-caching western scrub-jays keep track of who was watching when. *Science*, *312*, 1662-1665.

Tuesday, Sept. 16: The "false belief" task

Wellman, H. M., Cross, D. & Watson, J. (2001). Meta-analysis of theory-of-mind development: The truth about false belief. *Child Development*, 72, 655-684.

Thursday, Sept 18: False belief in younger children and infants

Onishi, K. H. & Baillargeon, R. (2005). Do 15-month-old infants understand false beliefs? *Science, 308,* 255-258.

Milligan, K., Astington, J.W., & Dack, L.A. (2007). Language and theory of mind: Meta-analysis of the relation between language ability and false-belief understanding. *Child Development*, 78,622–646.

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Tuesday, Sept. 30: Understanding desires and ignorance before false belief

Wellman, H. M. & Liu, D. (2004). Scaling theory of mind tasks. *Child Development*, *75*, 523–541.

Thursday, Oct. 2: Imitation

Meltzo , A. N. & Williamson, R. A. (2013). Imitation: Social, cognitive and theoretical perspectives. In P. D. Zelazo (Ed.), *The Oxford Handbook of Developmental Psychology* (pp. 651–682). Oxford: Oxford University Press.

Tuesday, Oct. 7: Brain development

Sabbagh, M. A., Bowman, L. C., Evraire, L. E., Ito, J. M. B. (2009).

Tuesday, Oct. 14: Language

Pyers, J. E. & Senghas, A. (2009). Language promotes false-belief understanding: Evidence from learners of a new sign language. *Psychological Science*, *20*, 805-812.

Thursday, Oct. 16: Siblings and Peers

McAlister, A. & Peterson, C. C. (2006). Mental playmates: Siblings, executive functioning, and theory of mind. *British Journal of Pevelopmental Psychology*, 24, 733-751.

Wang, Y. & Su, Y. (2009). False belief understanding: Children catch it from classmates of di erent ages. *International Journal of Behavioral Development*, *33*, 331-336.

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Outlines for review papers and detailed plans for dividing work equally are que at the end of class on October 30.

Although this week we will have group presentations in class, I am assuming that everyone will be continuing their work on their contributions to the review papers outside of class. This will include doing the research, integrating thoughts, and beginning work on a rough draft of their contribution.

Tuesday Nov 4!

Presentations from groups A, B, & C.

Thursday Nov 6!

Presentations from groups D, E, & F.

Group members should be circulating rough drafts of their unique contributions to the review paper to other group members for feedback, q diting, and integration into the whole paper.

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Tuesday, Nov. 18: In-class group work Continuing from the goals of week 10.

Thursday, Nov 20:
Presentations from Groups A & B

Tuesday, Nov 25
Presentations from Groups C & D

Thursday, Nov 27
Presentations from Groups E & F
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