

University of Waterloo
Waterloo ON
Phil/Psych 447 (Section 001)
Seminar in Cognitive Science: Mind and Meaning
Winter 2018, MW, 8:30-10:00a, Hagey Hall 150

INSTRUCTOR

Dr. Nicholas Ray (nmray@uwaterloo.ca)

Office: Hagey Hall, 322

Hours: Mondays and Wednesdays, 1:00-2:00 (or by appointment)

COURSE DESCRIPTION

How do thoughts and words get their meaning, and what might various theories of meaning tell us about the relationship between thought and language? In this course, we will examine how these two questions took on new form in philosophy, linguistics, cognitive psychology, cultural and cognitive anthropology, computer science, and AI development in the 20th and early 21st centuries, and how a focus on meaning remains central to all of these disciplines today.

Our journey will begin with theories of reference and linguistic content as they became popular in the early to mid-20th century in the so-called analytic philosophical tradition, and the debt owed to these earlier developments by contemporary researchers working in logic, formal semantics, and model theory. Then we will look at different approaches to language, starting mostly in the middle of the 20th century. The first is a focus on pragmatics – or how we do things with words. The second is Chomsky’s linguistics program, and its legacy.

We will also explore whether or not the language one speaks, and other cultural influences, have bearing on the thoughts we can entertain. We will also examine whether we can give an exhaustive account of meaning while only making reference to the internal state of the speaker/thinker, or whether meanings are necessarily sensitive to world-bound relations and maybe even social divisions in linguistic labour (to paraphrase the philosopher Hilary Putnam). Along the way, we will tackle a number of related concerns, such as the distinction between conceptual and non-conceptual (phenomenal) content; whether semantic content can be thought of as a biological category; what considerations drive taxonomies of mental content, and how these considerations might differ between philosophy, folk psychology, and cognitive psychology; the relationship between meaning, intentionality, and consciousness; the compositionality and systematicity of thought and language; the interpretation of other agents as rational believers; how best to theorize concepts; and a host of other issues.

COURSE TEXTS

There are no required texts that need to be purchased for this course. Readings will be made available on LEARN as PDF files or as links to external content. There may also be reserve items in the Dana Porter Library, though these will not be required readings.

INTENDED LEARNING OUTCOMES

The hope is that everyone learns about the relationship between theories of the mind and theories of meaning, between words and thought, and where meaning comes from. However, we also hope to achieve some learning outcomes not specifically tied to course content, including critical reading and writing skills, peer evaluation skills, and discussion and debate skills. By the end of the course, students should be able to

1. **Apply** the theoretical ideas we encounter to issues in the scientific study of mind and linguistic meaning.
2. **Critically assess** different theories of meaning.
3. **Seek connections** between the descriptive study of minds and language with more normative questions regarding the logical structure good/acceptable inference.
4. **Articulate a critical position** regarding the boundary between semantics and pragmatics.
5. **Hone your writing and research skills.**
6. Be able to **identify, name, analyse/define, and apply key terminology** from the various disciplines that study mind and meaning.

WHAT YOU MUST DO TO SUCCEED

- **Attend classes, and do the readings.** Nick will post some content from our meetings when it is possible to post it, but many of our meetings will not have a traditional lecture component. Because much of the course will be focussed on discussion, as a class or in smaller groups, much of your grade, and how you will perform on the writing assignments, relies on regular attendance and participation.
- **Be critical but fair** when dealing with ideas that are coming from a different perspective from your own. There are different disciplinary ways of talking about the mind and meaning, and we have to meet each other half way.
- Be willing to **clarify** your views using course concepts and terminology.
- **Engage in critical discussion.** Treat your interlocutor with respect, and apply the principle of charity. Also, expect the same from your interlocutor. We want to be humble in the process of knowledge-production. We are all fallible, and we are all part of a community of inquirers that can help limit the deleterious effects of our own biases and tendencies toward unclear thinking.

LEARN (COURSE WEBSITE)

LEARN is the main mode of communication for this course after lecture and e-mail. Nick will be posting lecture materials, assignment outlines, reading aids, announcements, the readings, any possible changes to the reading, and comments and grades for your major assessments via LEARN. Because LEARN is so important, students are strongly encouraged to regularly access the site.

ELECTRONIC DEVICE POLICY

You may use a laptop or a tablet functioning as a note-taking device. Please turn off phones. If you are found to be using your device for non-course related activities, you may be asked to leave.

NOTE: There is a wealth of empirical evidence that shows use of screens in a class has a negative impact on you and those around you. If you need to use a laptop or other note-taking device, and have no other accessibility issues, please move to the back or sides of the room, where your screen will be less distracting to others.

E-MAIL ETIQUETTE

1. Before sending an unnecessary e-mail to Nick, make sure your question isn't easily answered by the syllabus or assignment handouts.
2. All e-mails should include "447" or "Mind and Meaning" (etc.) in the subject heading, and your name in the actual e-mail. Leave **48 hours** for reply, though Nick usually responds much more quickly than that.
3. Think before sending any longer e-mails dealing with substantial content. Save your questions for class discussion where you get grades for it, and we all benefit from your query!

ASSESSMENTS AND DUE DATES

Assessment	Due Date	Page Length	Value
Bi-Weekly Reading Reflections*	At least 3 by February 16; up to 6 (keep the best 5 grades) by April 4	1 page each	3% x 5 = 15%
Short Essay	February 9	4 pages	15%
Proposal, Round 1: 3-Slide Presentation	Send Nick the slides by March 9 Presentations on March 12 and 14	Very short... 3 slides, y'all!	5%
Proposal Round 2: The Formal Proposal	March 18	approx. 3 pages	10%
Term Project	April 6	10-12 pages	35%
Participation	<i>Ongoing</i>	<i>NA</i>	20%

* There are 6 Mondays, beginning January 8 (excluding Family Day). You get to keep the best 5 grades.

ASSESSMENT OVERVIEWS

Reading Reflections: students will have to submit at least 3 Reading Reflections by the middle of term (February 16) and up to 6, keeping the 5 best grades, by the end of the term (April 4). Submit to the relevant dropbox on LEARN or bring a hard copy to class. They can be based on any of the course readings, or related external material that you have read, for topics that we have yet to cover. For example, if we have yet to study Frege's theory of sense and reference, you can write a reflection on his puzzle for identity (The Morning Star is the Evening Star), or on recent scholarly work related to descriptive theories of names. The reflections should do 2 things: (1) identify the piece, situating the reader with a brief overview of the content of the piece on which you are reflecting, and (2) offer a critical comment or two about your reading. They should therefore likely be comprised of two paragraphs.

Short Essay: this will require you to take any two course texts that disagree with one another on some issue (large or small), and put them into critical dialogue with one another. It will be your job to (1) contextualize the disagreement for your reader, (2) give a concise yet careful exegesis of the relevant passages from each author that sparked the critical comparison, and (3) adjudicate the disagreement between the two views.

Proposal Round 1: you will develop a 3-slide presentation that you can perform in 3 minutes. A lottery will be held to decide the order of presentations. The presentation should (1) identify the problem or question to be addressed, (2) indicate what course material (and any external material) will be useful to the discussion, and (3) state your tentative thesis regarding the research you have done. There will be 3 minutes for the class to ask questions or offer suggestions.

Proposal Round 2: This will be your formal plan of attack for the Term Project. Nick expects to see a working introduction that presents an interesting problem related to course material, provides a brief indication of the theoretical positions folks have taken on the issue, and your thesis/hypothesis/focus of research for the paper. You will also provide a skeletal outline for how you think the project will proceed, and an annotated bibliography including all relevant course material and at least two external sources.

Term Project: This is a major essay that you will have been developing since approximately the mid-point of the term. You will utilise lessons learned on the Reflections, the Short Essay, and the Proposal processes to craft a paper that explores one of several questions to be provided to you well in advance of the due date. If students prefer to explore a question of their own devising, or pursue a project that is not a traditional essay, then they should talk to Nick about their interests in advance.

Participation: There will be lots of class discussion. We will have relatively unstructured discussion, and, from time to time, more structured activities and group work (not unlike the first round of the Proposal process). Everyone is expected to be at every meeting, ready to engage in class discussion. You needn't say something every meeting, but your contributions should be frequent and of a very high calibre—always respectful and focussed on moving class discussion forward!

LATE POLICY

Reading Reflections will not be accepted after class on Monday. There are no make-up assignments. If you cannot attend class on Monday, then please let me know in advance of your absence, or accommodations cannot be made. Failure to present your Proposal to the class on March 12 or 14 will also result in a loss of grades. All other writing assignments will be penalized **10% of the assignment value per day**, including weekends and holidays, except in cases of documented illness or serious circumstances.

TENTATIVE SCHEDULE

The following is our plan for the term, but things might change. Students are expected to show up to class regularly so that they can know where we are in course discussions. Based on student interest, we might spend longer on some issues than others, so there is never a guarantee that we will be talking about these exact issues on these exact dates.

January 3: Welcome and Introduction

What is mind? What is Meaning?

1. Pitt, “Mental Representation” (link to *SEP* on LEARN)
2. Thagard, “Cognitive Science” (link to *SEP* on LEARN)

You needn’t actually do any reading for the first meeting. You might want to brush up on some of the content of Phil/Psych 256 by reading the Thagard *SEP* entry (if you took that course a long time ago), or read up on some of the major themes we will examine by reading the Pitt *SEP* entry—but neither is necessary reading.

January 8 and 10: Making Sense of the Linguistic Turn

What is the “content” in mental content?

1. Frege, “Sense and Reference”
2. Russell, “On Denoting”

January 15 and 17: Intentionality

What is “mental” about mental content?

1. Brentano, excerpt from *Psychology from an Empirical Standpoint*
2. Dretske, “The Intentionality of Cognitive States”
3. Dennett, “Real Patterns”

January 22 and 24: Pragmatics I—Doing Things with Words

What happens when we go beyond truth-functional semantics?

1. Strawson, “On Referring”
2. Austin, “Performative Utterances”
3. Donnellan, “References and Definite Descriptions” (OPTIONAL)

January 29 and 31: Pragmatics II— Implicature and Beyond
Is there a difference between meaning and saying?

1. Grice, “Logic and Conversation”
2. Recanati, “The Pragmatics of What is Said”

February 5 and 7: The Language Faculty
How much of our linguistic abilities are innate?

1. Chomsky, excerpts from *Syntactic Structures*
2. Chomsky, excerpts from *New Horizons in the Study of Language and Mind*
3. Everett, “Cultural Constraints on Grammar and Cognition in Pirahã”

February 12 and 14: Does Language Determine Thought
Don’t the Inuit have n terms for snow, where $n>1$?

1. Sapir, “The Status of Linguistics as a Science”
2. Davidson, “On the Very Idea of a Conceptual Scheme”

February 19 to 23: Family Day and Reading Week
No classes; no readings; no assignments are due!

February 26 and 28: Language of Thought
Are (almost?) all of our concepts innate?

1. Fodor, “Concepts – A Potboiler”

March 5 and 7: Prototype and Exemplar Theories
What do concepts look like when we move beyond the Classical View?

1. Rosch, “Principles of Categorization”
2. Smith and Medin, “The Exemplar View”

March 12 and 14: THE PRESETATION PHASE OF THE PROPOSAL PROCESS

All of our class time this week will be devoted to our 3-slide/3-minute presentations of our research projects. An order for presentations will be decided, and you have to send your presentations to me by Friday March 9.

March 19 and 21: Biosemantics and Other Teleological Theories of Meaning
Is semantics a kind in biology? Did meaning evolve?

1. Millikan, “Introduction to White Queen Psychology”
2. Millikan, “Biosemantics”

March 26 and 28: Content Externalism and Causal Theories of Reference **An alternative theory of the meaning of names and natural kind terms**

1. Putnam, “Meaning of ‘Meaning’”
2. Kripke, excerpts from *Naming and Necessity*

April 2 and 4: Concepts and Scientific Change

1. Carey, “Knowledge Acquisition: Enrichment or Conceptual Change?”
2. Gupta, “Meaning and Misconception”

ACADEMIC INTEGRITY

In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to [Policy 71 - Student Discipline](#).

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read [Policy 70 - Student Petitions and Grievances, Section 4](#).

Appeals: A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read [Policy 72 - Student Appeals](#).

OTHER SOURCES OF INFORMATION FOR STUDENTS

[Academic integrity](#) (Definition) [Academic Integrity Office](#) (uWaterloo)

ACCOMODATION FOR STUDENTS WITH DISABILITIES

Note for students with disabilities: The [AccessAbility Services office](#), located in Needles Hall Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AS office at the beginning of each academic term.