FORMAL SEMANTICS
LING 564

Administrative Information

- **Professor:** Robert Henderson
- **Office Hours:** Th 2-5PM and by appointment (COMM 306)
- **Email:** rhenderson@email.arizona.edu
- **Class Meeting Location:** Social Sciences, Rm 136
- **Class Meeting Time:** TuTh 12:30-1:45PM

Course Description:

This course has two broad goals: (i) to give students the technical skills to read formal semantics literature, (ii) to acquaint students with a wide variety of empirical phenomena that have motivated the development of the field. By pursuing these two goals, students will, by the end of the course, come to learn to think like a formal semanticist.

Specific Course Objectives:

This course is focused on helping students master the practice of formal semantics. Successful students will:

- Internalize the core motivation for formal semantics and its philosophical outlook
- Learn to identify the decision points that naturally arise when building an analysis of semantic phenomena—these always outline the phenomenon at hand and are more important than the analysis itself
- Master a variety of formal tools so that it is possible to build and adequately evaluate alternative analyses
- Come to have a healthy indifference to those same formal frameworks—the technical tools do not drive the investigation, but matter insomuch as they allow an analysis of particular data to evaluated (potentially in comparison to other analyses)
- Become familiar with a variety of empirical phenomena that have had a particularly strong impact on the development of the field

Topics Covered:

- Propositional and First-Order Logic
- Lambda Calculus and Montagovian Compositionality
- Generalized Quantifier Theory
• Modals and Conditionals
• Intensionality
• Scalar Implicatures

Course Textbooks

There is no required textbook for the course, but this course will still require a significant amount of reading, mostly primary literature, which will be posted to the course website.

Evaluation:

• Every Tuesday (unless otherwise specified) a student will present a 10-15 minute summary of the material introduced in the previous week of classes. The presenter will have to prepare a short handout (no more than 5 pages). The audience should be prepared to answer questions about the reviewed material that are asked by the presenter and/or the instructor.

• There will be several assignments. Their due date will be determined when they are handed out. The assignments will consist of technical problems designed to improve understanding of the formal frameworks involved, or they will ask you to follow up on various strands of analysis based on the in-class discussions.

• The review presentations and the assignments will require you to know both the material covered in lectures and the material in the assigned readings. These are related but are not identical, making **attendance absolutely essential. You will be counted absent for obviously having failed to read assigned material.**

Typed assignments are preferable, but handwritten assignments are also acceptable. Just please make sure that the text, formulas, etc. are clearly written. I strongly prefer assignments that are succinct. If your assignments are too verbose, I might ask you to rewrite them before I read through them. I will sometimes ask you to write up derivations in minute detail, but I will explicitly say so ahead of time.

Late Work Policy:

Late work will not be accepted unless there is a documented, unforeseeable emergency. (Loss of internet connection does NOT count as an emergency, nor does an extra shift at work, so plan ahead!) Take note that these assignments will take longer than you think to type up since they use weird symbols. Plan your time accordingly! You may petition the professor in writing for an exception if you feel you have a compelling reason for turning work in late.

Grading Policy:

A grade of A, B, C, D, or E will be given. The following minimum percentages will guarantee their corresponding letter grades.

A: 90% – 100%
B: 80% – 89.9%
C: 70% – 79.9%
D: 60% – 69.9%
E: 0% – 59.9%
Course Schedule:

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<tr>
<th>Week</th>
<th>Topic</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>Foundations</td>
<td>The very idea of truth-conditional semantics</td>
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<tr>
<td>2</td>
<td>Formal Pragmatics</td>
<td>Propositional logic, entailment vs. presupposition vs. implicature</td>
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<td>3</td>
<td>cont.</td>
<td>Grice and Scalar implicature calculation</td>
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<tr>
<td>4</td>
<td>cont.</td>
<td>Grice and Scalar implicature calculation</td>
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<tr>
<td>5</td>
<td>Representing Truth Conditions</td>
<td>First order logic, connectives, determiners, quantifiers, scope</td>
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<tr>
<td>6</td>
<td>cont.</td>
<td>First order logic, connectives, determiners, quantifiers, scope</td>
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<tr>
<td>7</td>
<td>Quantifiers and Compositionality</td>
<td>Generalized quantifier theory</td>
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<td>8</td>
<td>cont.</td>
<td>Simply typed lambda calculus</td>
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<td>9</td>
<td>cont.</td>
<td>Scope, type-shifting vs. quantifier-raising (is it syntax?), relatives</td>
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<td>10</td>
<td>Intensionality</td>
<td>Two sorted type theory (TY2)</td>
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<td>11</td>
<td>cont.</td>
<td>Propositional attitudes</td>
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<td>12</td>
<td>Modal Talk</td>
<td>Modal logic</td>
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<tr>
<td>13</td>
<td>cont.</td>
<td>Modals</td>
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<tr>
<td>14</td>
<td>cont.</td>
<td>Conditionals</td>
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<tr>
<td>15</td>
<td>cont.</td>
<td>Conditionals (Counterfactuals)</td>
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Inclusivity:

Inclusive Excellence is a fundamental part of the University of Arizona’s strategic plan and culture. As part of this initiative, the institution embraces and practices diversity and inclusiveness. These values are expected, respected and welcomed in this course.

This course supports elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request. As the course includes group work and in-class discussion, it is vitally important for us to create an educational environment of inclusion and mutual respect.

Accessibility and Accommodations:

It is the University’s goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact Disability Resources (520-621-3268) to establish reasonable accommodations. For additional information on Disability Resources and reasonable accommodations, please visit http://drc.arizona.edu/

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

Attendance Policy:

You are expected to attend class. The UA’s policy concerning Class Attendance and Administrative Drops is available at:
The UA policy regarding absences on and accommodation of religious holidays is available at:

http://deanofstudents.arizona.edu/policies-and-codes/accommodation-religious-observance-and-practice

Absences pre-approved by the UA Dean of Students (or Dean designee) will be honored.

Classroom Conduct:

To foster a positive learning environment, students may not text, chat, make phone calls, play games, read the newspaper or surf the web during lecture and discussion. Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Students who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

The Arizona Board of Regents' Student Code of Conduct, ABOR Policy 5-308, prohibits threats of physical harm to any member of the University community, including to one's self. See:

http://policy.arizona.edu/threatening-behavior-students

Student Code of Academic Integrity:

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See:

http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

The University Libraries have some excellent tips for avoiding plagiarism available at:

http://www.library.arizona.edu/help/tutorials/plagiarism/index.html

According to Section D (6) (a) of the University’s Intellectual Property Policy (which is available at http://www.ott.arizona.edu/uploads/ip_policy.pdf), faculty own the intellectual property for their course notes and course materials. The instructor holds the copyright to his/her lectures and course materials, including student notes or summaries that substantially reflect them. Student notes and course recordings are for individual use or for shared use on an individual basis. Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor’s express written consent. Violations to the instructor’s copyright are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA email to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student email addresses.

Additional Resources for Students:

UA Non-discrimination and Anti-harassment policy:
http://policy.arizona.edu/sites/default/files/Nondiscrimination.pdf

UA Academic policies and procedures are available at:

http://catalog.arizona.edu/2013-14/policies/aaindex.html

Student Assistance and Advocacy information is available at:

http://deanofstudents.arizona.edu/student-assistance/students/student-assistance

Confidentiality of Student Records:

http://www.registrar.arizona.edu/ferpa/default.htm

Subject to Change Statement:

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.
References


