LING 364: Introduction to Formal Semantics

Lecture 1

January 12th

Today's Topic

- *Administrivia and organizational stuff*

Your instructor

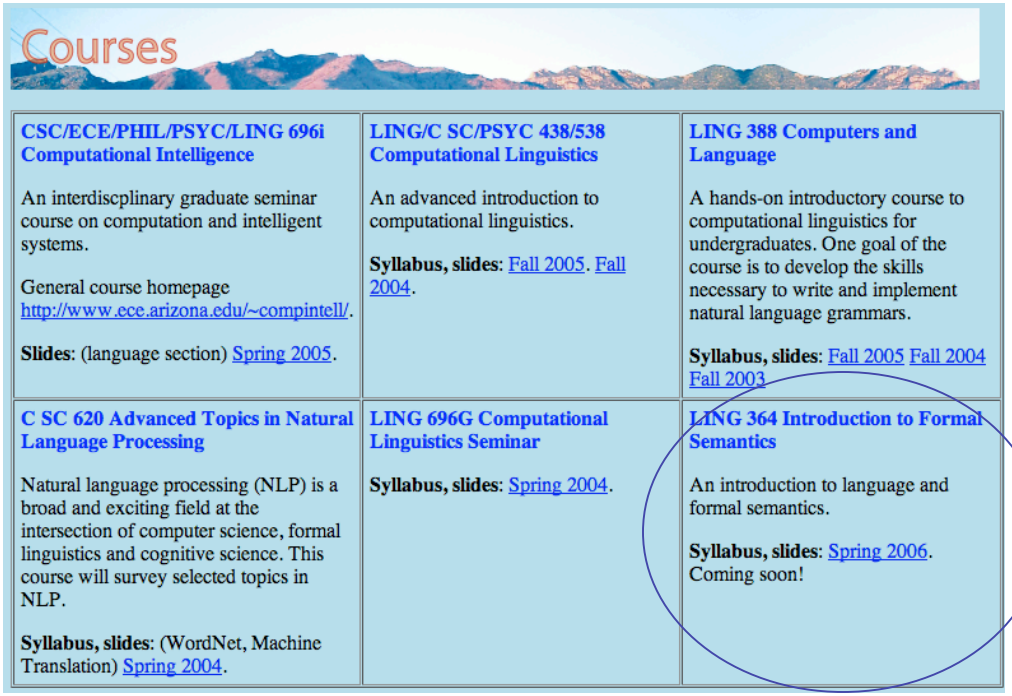
- Name
  - Sandiway Fong
- Affiliations
  - Linguistics and Computer Science
- Email
  - sandiway@email.arizona.edu
- Primary office
  - Douglass 308 (Linguistics)
  - *a bit difficult to find: at the end of a corridor on the 3rd floor accessible only by one of two staircases from the 2nd floor*
- Office phone
  - 626 5657

Location

- Communications 214
- Lectures will be generally held here unless otherwise announced

Homepage

- Course homepage:
  - http://dingo.sbs.arizona.edu/~sandiway
  - click on **Contents:** Courses



Lecture slides will be online

PowerPoint and PDF

Here

Mailing List

in the process of being created...

- ling364@listserv.arizona.edu
- clarification/changes/corrections to homeworks
- discussion
- ask questions to other students

Instructional Computing Lab (ICL)

- Some lectures will be held in the computer lab

Instructional Computing Lab (ICL)
Social Sciences Room 224

Hours: 8 AM - 7 PM Mon - Thu, 8 AM - 6 PM Fri.

Available software includes MS Office XP with FrontPage, Macromedia StudioMX, SPSS for students, R for Windows, STATA 8.0, ArcView GIS 3.2, UCINET, ActivePerl, Java, Allegro Common Lisp, SWI Prolog, Amos for student, Lisrel for student, HLM for student, CLAN, Lemwin, LogicCoach, Praat, SSH, X-Win32, IPA fonts, and IME's for several languages.

logic software

Instructional Computing Lab (ICL)

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- You can use the lab anytime... schedule available at:
- http://sbsri.web.arizona.edu/new_page_2.htm

Instructional Computing Lab (ICL)

- **There will be a computer lab class next Thursday (19th)**
  - an introduction to logic on the computer using SWI-Prolog

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Instructional Computing Lab (ICL)
Social Sciences Room 224

Hours: 8 AM - 7 PM Mon - Thu, 8 AM - 6 PM Fri.

Other computer facilities

- or, instead of using the SBSRI ICL
- you could use your own PC or laptop ...

- install SWI-Prolog on your machine
  - free download from
  - http://www.swi-prolog.org/
  - available for PC Windows, MacOS X, Linux ...

Office Hours

- Office
  - Douglass 308
- Typically after class (1 hr)
- Or by appt. (send email)

Textbooks

- None required
  - readings will be handed out
  - or made accessible via the web
- Suggested introductory texts

  ... there are many out there
  - Meaning and Grammar: *An introduction to semantics*. Chierchia & McConnell-Ginet MIT Press 1990
  - Knowledge of Meaning: *An introduction to semantic theory*. Larson & Segal MIT Press 1995

Homeworks and Quizzes

- Mix of homeworks and short quizzes
  - expect approx. 6 homework assignments
    - longer and more in-depth in nature
    - worth many more points
  - a short quiz (just about) every week
    - gauge your understanding
    - format:
      - lecture finishes early
      - do it during the last 15 minutes of class
      - hand it in right away

Homework Policy

- You can discuss the assignment with your classmates, but you must write it up on your own
- If you use other sources, e.g. from the web, texts or someone else, it is not only good form to do so **but** you ***must*** cite them
  - *there is no penalty for mentioning your sources*
- *do not cheat or plagiarize*!

- Homeworks will be introduced in class
  - lecture slides
  - *a good chance to ask informational and clarification questions*

Homework Policy

- Homeworks are due one week from the assignment
  - submit by email (to me)
  - due in my mailbox by midnight
- Please attempt homeworks early!
  - ***chance to ask questions before/after class etc.***
  - avoid the stress of last-minute emails
  - avoid crucial information gaps

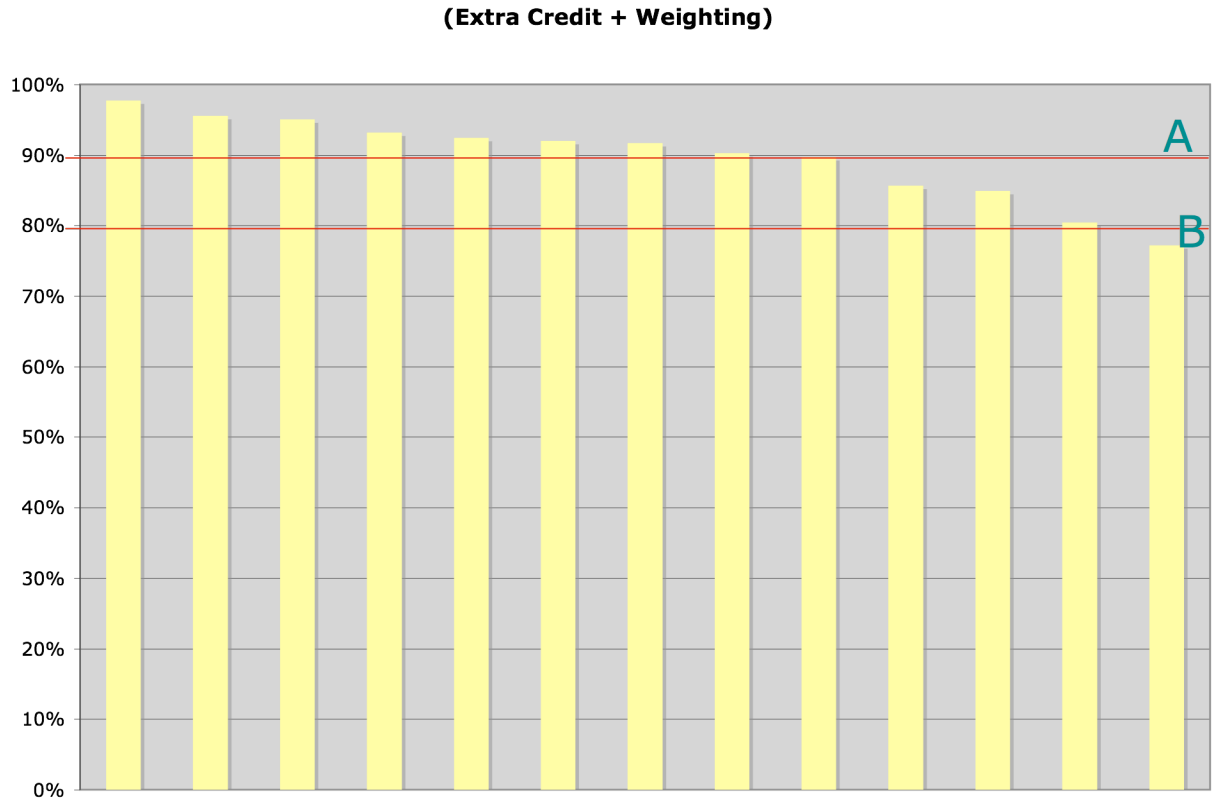
Grading

- In total, homeworks will generally be worth much more than the short quizzes
  - about a 75-70% / 25-30% ratio
- There may **or may not** be a final exam
  - depends on how the class is doing
  - *(if so) view it as an opportunity to improve your score*
  - if given, it will be a **take-home exam** worth about 25% of the grade due by midnight the next day
- Final grade based on an objective formula
  - score = W_1*homeworks + W_2 * quizzes (+ W_3* final)
  - if you skip a homework, I cannot give you an A

Grading

- an example:

BTW, these numbers may or may not be the thresholds for this class



Grading

- Homeworks may contain extra credit questions
  - a chance to demonstrate your grasp of the material
  - insurance if you make some errors on other questions (*in the same homework*)
    - i.e. you can still get 100%
    - idea: *you are not penalized unduly for small errors*
  - **I highly recommend you attempt them**
- Extra credit points
  - are not bankable or transferable across homeworks
  - i.e. you will still need to demonstrate your good understanding of other topics

Tasks

Homework Task 1 for Today

- Email me (sandiway@email.arizona.edu)
  - Name:
  - Contact email:
  - Year:
  - Major:
  - Background:
  - Relevant Background:
  - Why are you interested in natural language semantics?

Homework Task 2

- **Reading for next Tuesday**
  - *25 copies available as a handout*
- From the book:
  - **What is Meaning?**
  - *Fundamentals of Formal Semantics*
  - P. Portner
  - 2005, Blackwell
- Chapter 1:
  - **The Fundamental Question**

"the big picture"
a nice informal overview: no formulas

Homework Task 2

- Read it **before** next class
  - we will go through it in class
  - we will finish 15 minutes early
  - there will be a simple quiz at the end
    - **you have 15 minutes**
    - hand in quiz at the end of the lecture

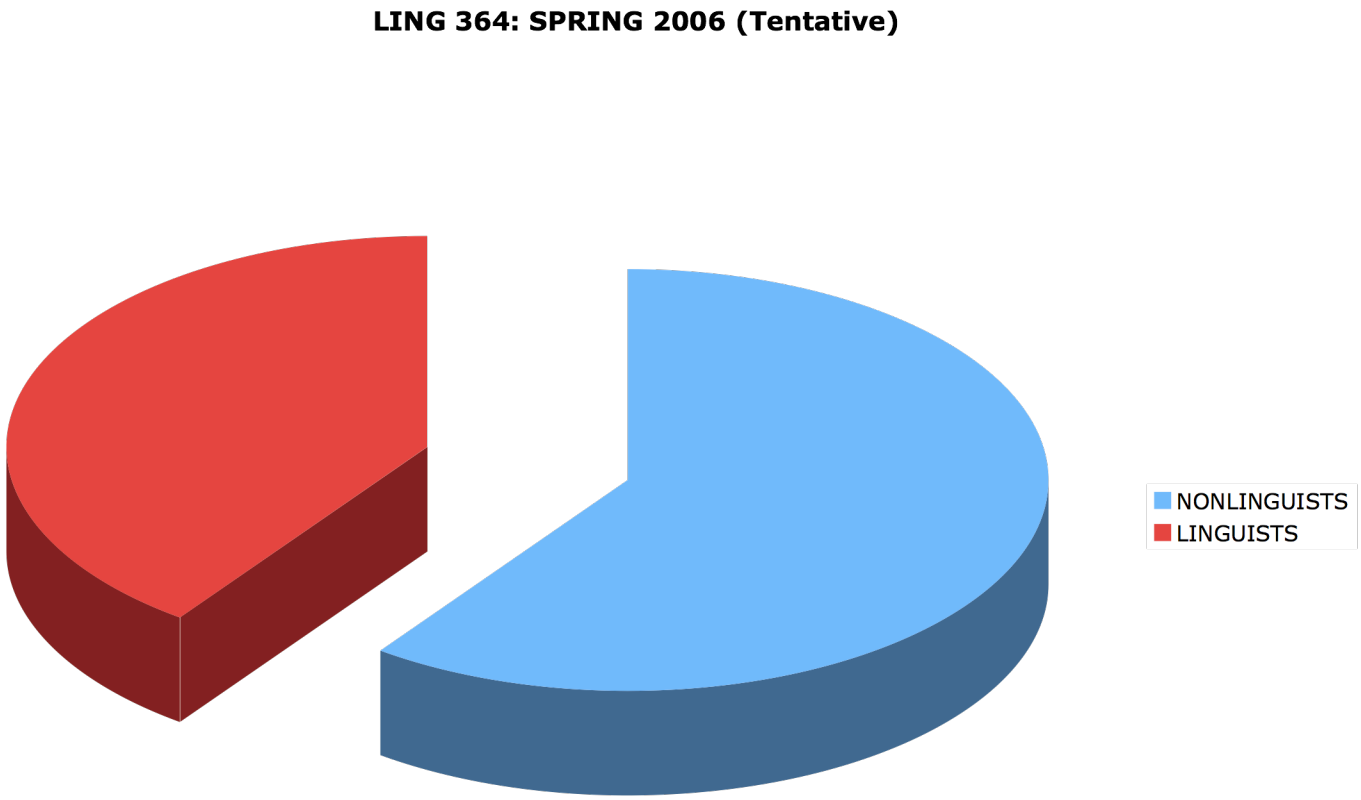
Course Objectives

- Two goals:
  - (1) ***on the theoretical side***
  - Understand what is meant by **natural language semantics**
    - what does it mean to work out the "meaning" of a sentence, phrase or utterance
    - what quasi-technical terms like entailment, possible worlds, truth conditions, quantification, scope ambiguity, synonymy, presupposition, logical deduction, reference, inference rule etc. mean
    - the relation between natural language and formal logic
    - the relation between syntax and semantics with respect to formal grammars
    - awareness of issues and data
    - *etc*...

Course Objectives

- Two goals:
  - (2) ***on the practical side***
  - gain experience with **formal systems** and build something tangible
    - this is an introductory course – *don't panic*
    - first-hand experience on how to write logic expressions
    - practice how to formalize notions
    - how to run logical deduction on computers
    - use and write grammars for semantics
    - we'll use SWI-Prolog
    - by the end of this course you will be able to write formal grammars integrating the computation of **meaning** as well as **syntax** for fragments of English
    - (*we begin this process in the ICL next Thursday*)

Class Demographics



That’s all for today...

- *Remember your two tasks...*