PHIL 2303.001: Introduction to Logic  
Fall 2014  
Time: MW 2:00-3:15  
Location: CI-108

Instructor: Ana-Maria Andrei, PhD  
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Office Hours: TBA and by appointment  
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Course Description  
The course introduces you to some basic concepts and methods employed to analyze and evaluate arguments. We will look at several logical systems (e.g., syllogistic logic, propositional logic and predicate logic), and will examine their relative strengths and weaknesses. We will practice employing these formal tools to identify, analyze and evaluate a wide variety of arguments. Although time constraints will not allow us to focus explicitly on standardized tests such as the LSAT, GMAT or GRE, the skills acquired by studying logic help candidates get good scores on such tests. More generally, developing one’s ability to think logically is a precondition of success in most domains of inquiry, as well as in everyday communication.

Student Learning Outcomes  
Upon completion of the course, you should be able to:  
- define central logical terms such as argument, validity, soundness, induction, deduction, fallacy, etc.  
- translate natural language sentences into the relevant formal language  
- test the validity of arguments using the techniques required by the relevant logical system (e.g., Venn diagram, truth tables, proofs, etc.)  
- be able to apply the logical tools introduced in the course to analyze and evaluate arguments from everyday sources

Required Texts  

Course Requirements  
- in-class and homework assignments;  
- five quizzes on the following dates: 09/15, 10/01, 11/03, 11/12 and 11/24 (quizzes typically include true/false, multiple choice and short answer questions pertaining to the relevant chapters; the lowest quiz score will be dropped);  
- two exams (the exams contain the same kinds of questions as the quizzes, but are longer and cover more material).

Grading Policy  
Grade breakdown:
midterm 25%  
final 25%  
quizzes 40%  
in-class and homework assignments 10%

Final letter grades will be assigned based on the following percentages:
Over 90% = A  
80 – 89% = B  
70 – 79% = C  
60 – 69% = D  
Below 60 = F

**Attendance and Late Work Policy**
Missing more than 4 classes will negatively impact your final grade. No late work will be accepted, unless due to extreme circumstances.

**Students with Disabilities**
Texas A&M University-Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Services for Students with Disabilities Office, located in Corpus Christi Hall #116, at 825-5816. If you need disability accommodations in this class, please see me as soon as possible.

**Academic Advising**
The College of Liberal Arts requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. The College’s Academic Advising Center is located in Driftwood 203E and can be reached at 825-3466.

**Grade Appeal Process**
Students who feel that they have not been held to appropriate academic standards as outlined in this class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details on the process of submitting a formal grade appeal, please visit the College of Liberal Arts website, cla.tamucc.edu/students/studentinfo.html. For assistance and/or guidance in the grade appeal process, students may contact the Associate Dean.

**Course Schedule**

Week 1 (08/27) **Introduction**  
Week 2 (09/03) **Basic concepts** (chapter 1)  
**Recognizing arguments**  
Week 3 (09/08, 09/10)
Validity and soundness
Proving invalidity
Week 4 (09/15, 02/17) Fallacies (chapter 3)
  Types of fallacies
  Fallacies in ordinary language
Week 5 (09/22, 09/24) Categorical propositions (chapter 4)
  Types of categorical propositions; immediate inferences
  The square of opposition
Week 6 (09/29, 10/01) Categorical propositions (chapter 4), cont’d; Categorical Syllogisms (chapter 5)
  Venn diagrams
  Syllogisms: standard form, mood and figure
Week 7 (10/06, 10/08) Categorical Syllogisms (chapter 5), cont’d
  Venn diagrams for syllogisms
  Rules and fallacies
Week 8 (10/13, 10/15)
  Review Session
  Midterm exam
Week 9 (10/20, 10/22) Propositional logic (chapter 6)
  Truth functions
  Translation exercises
Week 10 (10/27, 10/29) Propositional logic (chapter 6), cont’d
  Truth tables
  Argument forms and fallacies
Week 11 (11/03, 11/05) Natural deduction (chapter 7)
  Rules of implication
  Rules of replacement
Week 12 (11/10, 11/12) Natural deduction (chapter 7), cont’d; Predicate logic (chapter 8)
  Natural deduction: exercises
  Predicate logic: symbols; translation exercises
Week 13 (11/17, 11/19) Predicate logic (chapter 8), cont’d
  Rules of inference
  Proofs in predicate logic
Week 14 (11/24, 11/26) Induction
  Analogy and legal and moral reasoning (chapter 9)
  Probability and statistical reasoning (chapters 11 and 12)
Week 15 (12/01)
  Final Review

[The final exam will be held on the assigned date.]