

Introduction to Logical Reasoning

Course Introduction

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Course Goals

The major goal of this course is to develop your critical thinking abilities. In particular, you will develop skills for understanding and evaluating arguments in a variety of contexts.

Course Outline

This course is broken into three parts:

Part 1: Identifying and understanding the structure of an argument (units 1 and 2),

Part 2: Assessing arguments of differing forms (units 3, 4, 5, and 6), and

Part 3: Exploring how to reason logically in everyday life (unit 7).

Course Requirements

The requirements for the course are:

- Participation (10%),
- 13 Problem sets,
- 11 Quizzes with lowest 3 dropped (30%), and
- 3 Exams (60%).

Grading

The problem sets are neither collected nor graded. It is up to you to spend as much (or as little) time on them as you see fit to learn the skills they teach.

Quizzes and exams are graded. The points you earn on each of these are normalized to a 5-point scale for calculating letter grades. However, keep in mind that this is not *not* a curve. Everyone can get an A; everyone can fail. (Let's aim for the former!)

Late Policy / Absence Policy

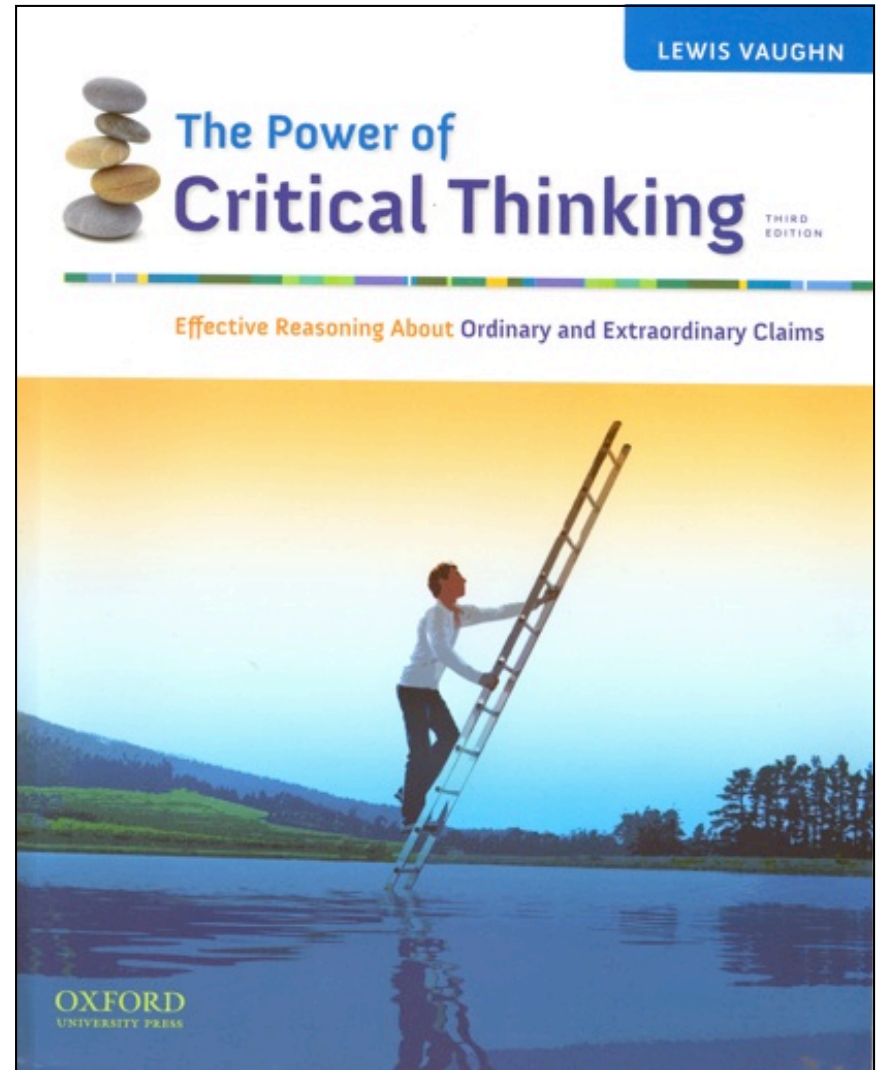
Please note that this course has very strict late and absence policies: I do not accept late assignments, and you get no “free” absences in this class. There are only two exceptions to this:

1. You and I reach a reasonable accommodation, or
2. You provide me with a signed letter.

If you do not feel that you can meet these requirements, please enroll in another course.

The Textbook

Make sure you have a copy of the textbook! Let me know right away if you have any problems getting a copy.



Course Website

Please visit the course website regularly:

<http://www.andrew.cmu.edu/user/degray/logic/>

It will have the problem sets, lecture slides, and all other course materials.

Academic Integrity

Academic integrity is embodied by commitments to honesty, respect, trust, diligence, and rigor in the pursuit of knowledge.

The most common violation is copying a neighbor's answers on a quiz/exam. To discourage this, your neighbors' quizzes/exams will be different from yours.

If you ever feel the pull of temptation, please see me for an alternative course of action.

Other Essentials

Please be familiar with the policies in the syllabus for reasonable accommodations and challenging assignment grades.

Extra Credit

Extra credit 0: Introduce yourself to me at my office sometime this week. My office is right next to the men's prayer room on the first floor.

In addition, every problem set has a logic puzzle that you can solve for extra credit. The writeup for each is due at the beginning of the following Sunday's class.

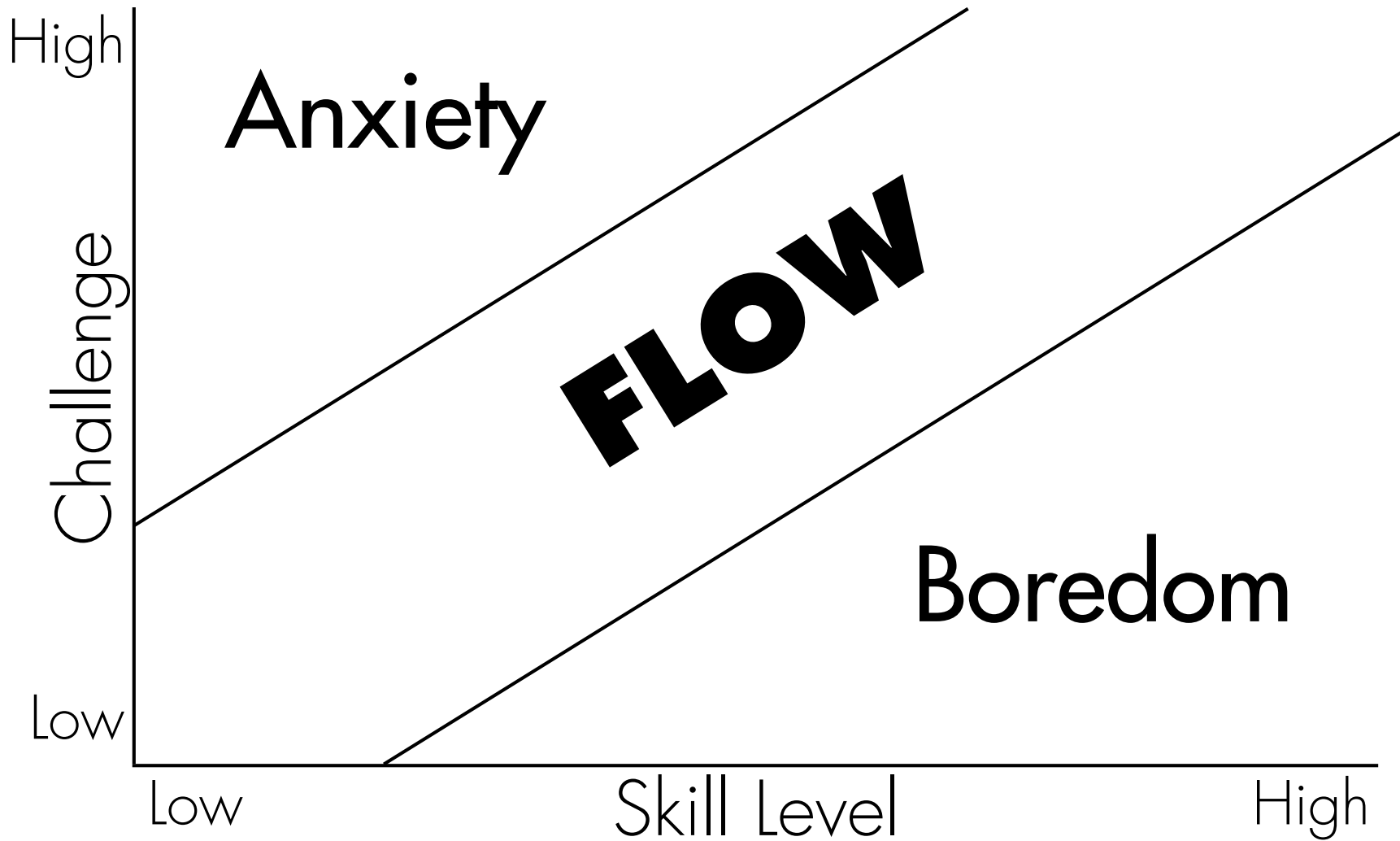
Remember: Group work is fine for the extra credit, but you need to turn in your own work with responses in your own words. Also, please indicate with whom you worked.

iClickers in the Classroom

During the semester, I'll be using iClickers to gather information on your impressions of the course and the material we are covering.

While your iClicker will be “your’s” throughout the semester, I will only know your clicker’s ID and not your name. That is, I am following the iClickers, not people’s names. This allows me to track how your progress while not knowing whose progress I am seeing.

Flow



Argument 1

Consider the following argument:

All roses are flowers, and some flowers fade quickly. Therefore, some roses fade quickly.

Is this a logically valid argument? That is, does the conclusion logically follow from the premises?

Argument 2

Consider the following argument:

If I have the flu, then I do not feel well.

I do not feel well, so I must have the flu.

Is this a logically valid argument? That is, does the conclusion logically follow from the premises?

Next Class...

We will start exploring arguments by looking at their basic building blocks: statements.

The reading is a handout, so make sure you get a copy of it before you leave today (or download it from the course website). In the future, however, you'll have to download any readings from the website yourself.