

Introduction to Logical Reasoning

Course Introduction

David Emmanuel Gray

Northwestern University in Qatar
Carnegie Mellon University in Qatar

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.

Since the emphasis of this course is on *logical* reasoning, you will learn to use a variety of formal methods for argument analysis.

Course Requirements

All course requirements are designed to help you develop these abilities and learn these methods.

- Attendance/Participation (10%),
- 14 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 6-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!)

Course Outline

This course is broken into three parts:

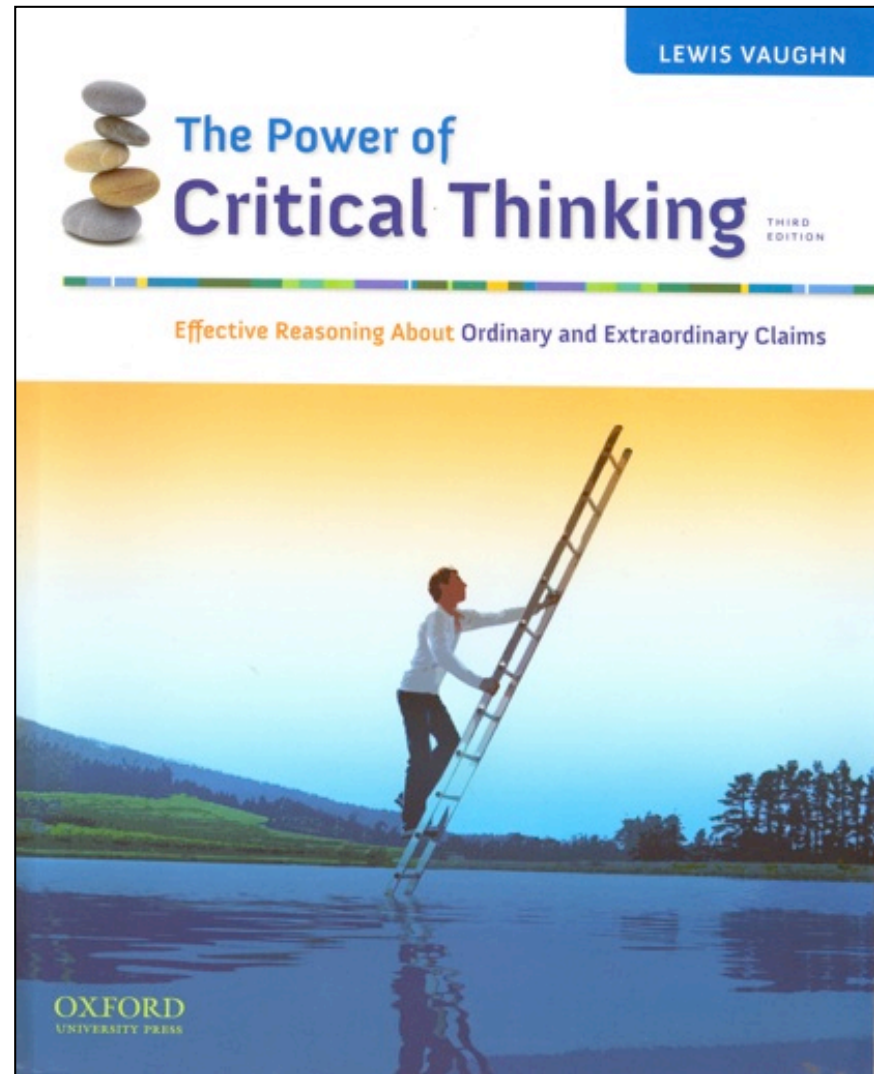
Part 1: Identifying and understanding the structure of an argument (units 1 and 2),

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

Part 3: Avoiding fallacies and other ineffective forms of reasoning (unit 7).

Other Essentials

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



Other Essentials

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. Bookmark it. A link to the website can also be found on Blackboard.

Other Essentials

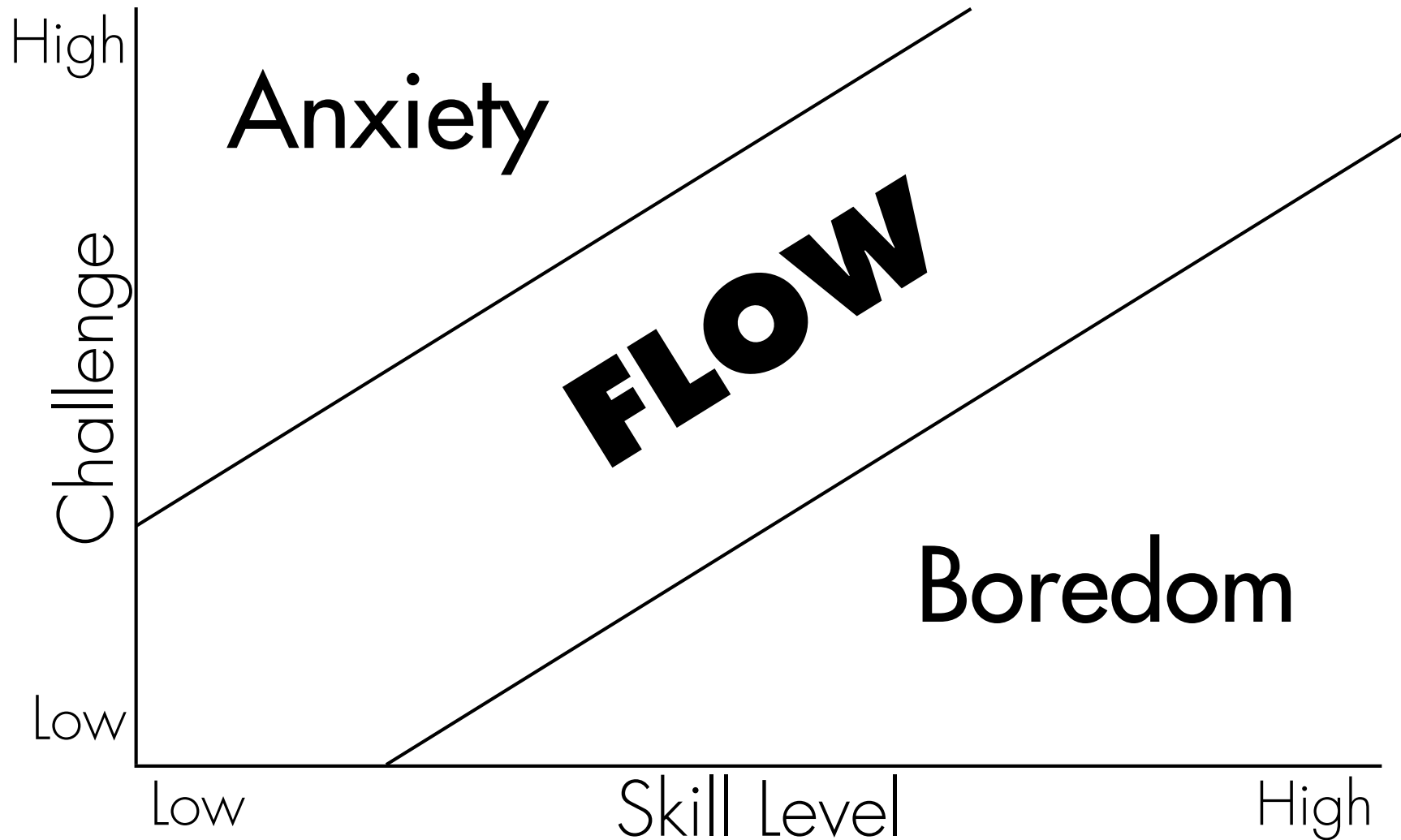
Please be familiar with the policies in the syllabus for reasonable accommodations and challenging assignment grades.

Clickers in the Classroom

During the semester, I'll be using clickers to gather information on how people are finding the course material. I will then use this information to augment the course as the semester progresses.

While your clicker will be “your’s” throughout the semester, I will only know your clicker’s ID # and not your name. That is, I am following clickers, not names. This allows me to track how people’s views evolve, but not know whose views they are.

Flow



Clickers

Follow the on screen instructions for the roll call to register your clicker to you. This is now your clicker for the entire semester.

An Argument

Consider the following argument:

George W. Bush was winning the war on terror. This is because while *he* was President there were no successful terrorist attacks on American soil after 9/11. For if Bush was winning the war on terror, then there would be no successful terrorist attacks on American soil after 9/11.

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).