

## Math 330 Section 3 Homework 03

*Written assignments: NONE*

### Status - Reading Assignments:

Here is the status of the reading assignments you were asked to complete by this date.

Textbook: all of ch.1 and ch.2

Other course material:

Nothing until this homework #3.

### New reading assignments:

**Reading assignment 1 - due: Wednesday, September 16** Read carefully ch.3 in the book on logic. This chapter is very hard to follow as it is **very condensed**. I feel that you will understand things a lot better and might save some time overall if you follow my advice and do the optional Reading assignment 2 before reading ch.3 of the book in depth. Once you've done that second assignment reread ch.3 again. This time try to understand everything!

Be prepared to take a quiz which asks for everything asked for in previous assignments PLUS

- the definitions of universal and existential quantifiers plus notation:  $\forall$ ,  $\exists$ ,  $\exists!$ ,
- ALL SIX alternate ways of english wording to express "A implies B" (check the margins of section 3.2 on implications),
- iff** (double-implication), **converse**, **contrapositive**,
- the negation of statements like "A and B", "A or B" and statement with quantifiers

Special recommendation for students for whom English is a second language: You may have an additional barrier to overcome, especially in point b above: It's tricky to understand why "A implies B" is equivalent to "B whenever A" and "A only if B". Try to discuss this with someone of your language background who has some background in abstract Math or with someone for whom English is the first language.

**Reading assignment 2 - optional** Click the link "Logic part 1" in the course materials page of the web site and read the document according to the guidelines I have outlined (only up to the section on NAND and NOR Operators, etc.) Doing so should make understanding of the B/G chapter on logic much easier. As mentioned on the course materials page, try to understand the subject of truth tables.

**Reading assignment 3 - due: Wednesday, September 16** Click the link "Sets part 1" on the course materials page and read that document according to the instructions on the course materials page.