PH133 Logic : Extra Seminars
Answer these questions on paper, do not use Fitch &c.

It is not required that you can answer the questions immediately. Think about them carefully about them over several hours if you need to.

1. Should I attend the extra seminar on proofs?

(a) Can you give a counterexample to the following argument?

$$A \lor B$$
$$B$$
$$\neg A$$

(b) Can you prove the following argument?

$$\neg A \rightarrow A$$
$$A$$

If you answered no to (a) or (b), you should attend the extra seminar on proofs.

2. Should I attend the extra seminar on translations?

(a) Can you translate $\neg \exists x$ BetterSinger(x,a) into English using the following interpretation?
  a : Mia
  BetterSinger(x,y) : x is a better singer than y

(b) Can you translate 'Some members of Hezbollah are members of the Talliban' into FOL (Logiya) using the following interpretation?
  Taliban(x) : x is a member of the Taliban
  Hezbollah(x) : x is a member of Hezbollah

If you answered no to (a) or (b), you should attend the extra seminar on translations.

3. Should I attend the extra session on truth tables?

(a) Do you know the truth table for $A \land B$ and the truth table for $A \lor B$?

(b) Can you construct the truth table for $A \land (\neg B \lor C)$?

If you answered yes to (a) and no to (b), you should attend the extra seminar on truth tables.