

This Wed : Eng 3402

## Stats 325: Information about the Term Test

The Term Test will take place 12-1pm on Wednesday 14th September, in the usual lecture room (Eng 3402). It is worth 10% of the final grade (325 students), or 7% of the final grade (721 students), unless you qualify for plussage. If you qualify for plussage, the 325 assignments and test can be removed from your final grade if this gives you a better mark. **Note that you need to achieve at least 70% on all 325 coursework (test plus the five assignments) in order to be considered for plussage.**

### Important!

- Arrive promptly before 12pm. We will use the whole hour (12pm start), so please be sure to arrive on time.
- Bring your own paper to write on. Put your name and ID number at the top of your answers.
- Bring a calculator.

### Questions from past tests NOT relevant in 2011:

The following questions from past tests are NOT relevant this semester, due to some reorganisation of the course material:

- 2009 : omit (d), (e)
- 2008 : omit 2(c)
- 2005 : omit all of Q2 and Q4
- 2004 : omit all of Q2 and Q3
- 2003 : omit all of Q3
- Mock Test : omit all of Q2

### Question outlines

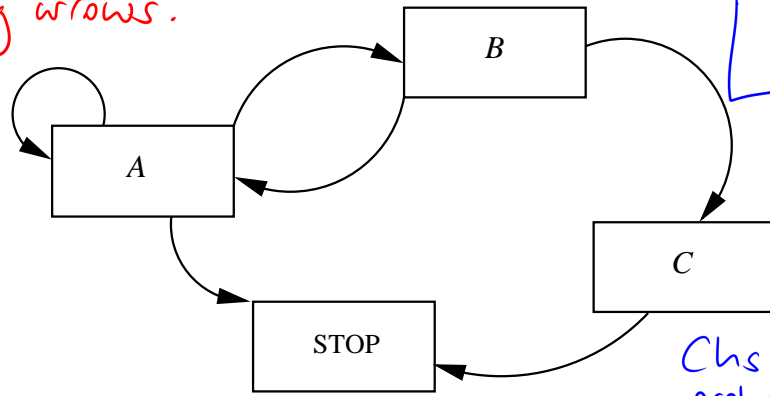
The test will be similar in style to the previous tests given out in class and on the webpages, except there will be **no question on generating functions or branching processes.**

The best preparation is to **practise** on past tests, and to revise the material on Assignments 1 and 2.

You should be prepared for questions of the following type.

The question paper will TELL You whether you should be counting as you go through a box/boxes, or whether you should be counting arrows.

Practise past tests



First-step analysis  
 "Define your notation"  
 ↓  
 first-step analysis?  
 Chs 2 & 3 + trajectory probability (Ass 1 Q5)

1. A transition diagram might be given, with boxes, arrows, and probabilities, similar to (but *not* the same as) the sketch above.

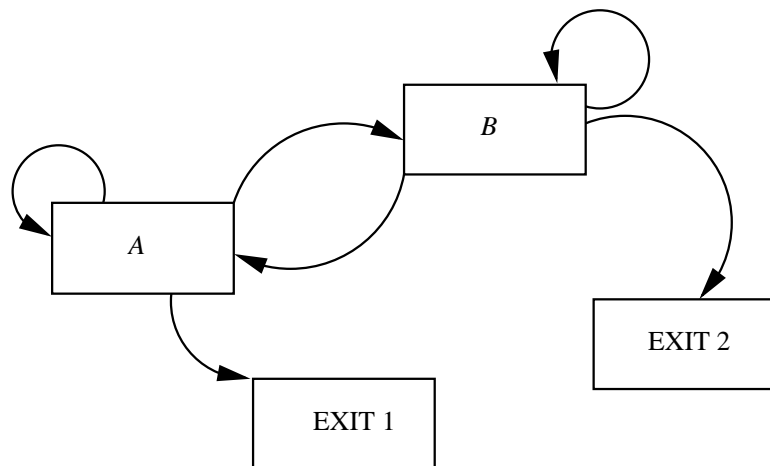
You might be asked to calculate the expected time taken to get through the system, to the box 'Stop'. This will correspond to the expected number of *steps* taken. It will be equivalent to the **expected number of arrows traversed** from the beginning to the end of the system, in the same way as we saw on Assignment 2.

**For Practice:** Assignment 2; Past tests.

2. You might be asked to find the expected number of times you pass through one or more given boxes before stopping, using first-step analysis.

**For Practice:** Assignment 2; Past tests.

3. A transition diagram might be given with two possible exits: similar (but *not* the same as) the sketch below:



You might be asked to find the probability of finishing in Exit 1, using first-step analysis.

**For Practice:** Assignment 1; Past Tests.

**Good Luck!**