



College of Commerce
Division of Economic and Financial Studies
Business Department

DEM 356:

Demographic Techniques

UNIT OUTLINE

Semester 2, 2005

Lecture: Thursday, 1:05pm – 2:55pm, E6A 133
Tutorial: Thursday, 3:05pm – 3:55pm, E6A 133

UNIT CONVENOR: PROFESSOR FARHAT YUSUF
LECTURER: ALISON CULPIN

Prerequisites: DEM 127(P); DEM 255 (P) or DEM 256 (P)

Students in this unit should read the Unit Outline carefully at the beginning of the semester. It contains important information about the unit. If anything in it is unclear, please consult the Unit Convenor.

DEM356: DEMOGRAPHIC TECHNIQUES

Second Semester 2005

ABOUT THIS UNIT

Unit description and rationale

This is an advanced level quantitatively-oriented demography unit. Some of the more advanced demographic techniques discussed include testing the accuracy of demographic data and their graduation, methods of estimating major demographic parameters, multiple decrement tables, and some relevant epidemiological techniques.

Credit points for this unit: 3

TEACHING STAFF

Lecturer:

Ms. Alison Culpin
Room: C5C-318
Email: aculpin@efs.mq.edu.au

Guest Lecturer

Mr J. M. Martins will be a guest lecturer in this unit.

If you cannot make the scheduled consultation hours you are still welcome to visit the staff, however, since there is no guarantee that the staff will be available outside the consultant hours, phoning or emailing to make an appointment would be advisable.

CLASSES

Lecture Time and Venue

Lectures/tutorials will be held in E6A-133, on Thursdays from 1.05 pm to 2.55 pm (lectures) and from 3:05 pm to 3.55 pm (tutorials). The tutorial session will start from the first week. *Please note that attendance sheets will be circulated at the beginning of each session and it will be your responsibility to ensure that you sign the sheets.*

REQUIRED AND RECOMMENDED READINGS AND OTHER SOURCES OF INFORMATION

There is no prescribed textbook for this unit. A list of references will be given in lectures when applicable and posted on the DEM356 website <http://www.bus.mq.edu.au/dem/356.htm>.

Please note that the lecture notes provided each week offer only a skeletal coverage of the topics covered in lectures and therefore it is essential you compile notes of your own during the lectures and from recommended readings.

The DEM356 Bulletin Board website <http://www.bus.mq.edu.au/dem/356bulletin.htm> will be used to relay information about the unit to students. It is expected that students will visit this website on a regular basis.

UNIT WEB PAGE

The address of the Macquarie University Demography website is www.bus.mq.edu.au/dem/.

The site contains an array of materials relating to the various undergraduate units in demography. Additional materials will be added from time to time. Of particular importance is the DEM356 Bulletin Board <http://www.bus.mq.edu.au/dem/356bulletin.htm>. The Bulletin Board will be used by the Unit Convener to relay information about the unit to students.

LEARNING OUTCOMES

The main objectives of this unit include:

- to acquaint you with the concepts of demographic analysis
- to introduce advanced demographic techniques, and
- to introduce some useful methods in medical demography and epidemiology.

The main outcomes that students are expected to achieve from this unit include:

- understanding of the quality of demographic data;
- knowledge of adjusting irregular or poor quality data;
- ability to analyse demographic data using advanced demographic methods;
- competence in the use of established population models and advanced methods to estimate major demographic parameters;
- appreciation of usefulness of demographic analysis; and
- knowledge and understanding of demographic data for Australia and selected overseas countries.

TEACHING AND LEARNING STRATEGY

The teaching strategy consists of the provision of information and worked examples in the weekly lecture and tutorial on Thursdays. Copies of overhead lecture notes for each topic will be distributed in class. It is expected that students will attend the weekly lectures on a regular basis and will actively take notes during the lectures.

Since the credit point rating of this unit is 3, you are expected to spend a total of 12 hours per week on the study of this unit. This includes time spent in lectures/tutorials as well as doing various assessment tasks, revising lecture notes, reading the literature and preparing for the class test and the end-of-year examination.

A week-by-week list of the lecture topics is provided on the following page.

DEM356: DEMOGRAPHIC TECHNIQUES

Schedule of Lectures

Week	Date	Topic	Lecturer	Assignment	
				Given	Due
1	4 Aug.	Introduction. Rates, ratios, life tables.	AC		
2	11 Aug.	Multi decrement tables and their uses. Working life tables and nuptiality tables.	AC	1	
3	18 Aug.	Testing the accuracy of demographic data.	AC		1
4	25 Aug.	Techniques of adjusting and smoothing of demographic data – I.	AC	2	
5	1 Sep.	Techniques of adjusting and smoothing of demographic data – II.	AC		2
6	8 Sep.	Curve Fitting and Modelling in Demography Methods of estimating internal migration.	AC		
7	15 Sep.	Component analysis	AC	3	
MID-SEMESTER BREAK (17 Sep. – 3 October)					
8	6 Oct.	Class Test (No tutorial this week)			
9	13 Oct.	Stable population and use of model life tables in the estimation of demographic parameters – I.	AC		3
10	20 Oct.	Stable population and use of model life tables in the estimation of demographic parameters – II.	AC	4	
11	27 Oct.	Medical demography and epidemiology – I.	JM		
12	3 Nov.	Medical demography and epidemiology – II	JM		4
13	10 Nov.	Conclusion and unit evaluation.	AC		

(AC) Ms. Alison Culpin (Lecturer)

(JM) Mr. Jo M Martins

RELATIONSHIP BETWEEN ASSESSMENT AND LEARNING OUTCOMES

The requirements of this unit consist of regular attendance at lectures and tutorials, satisfactory completion of the assignments, class test, and the final examination.

There will be four assignments throughout the semester, which will help students to practise what they have learned in the lectures. All questions in the assignments, class tests and final exam will reflect the learning outcomes listed at the beginning of this unit outline.

The weighting given to the various assessment tasks will be:

- assignments (15%)
- mid-semester class test (20%) and
- the final examination (65%)

Please note that you must achieve a reasonable performance both in the classwork (class attendance, assignments, and class test) and in the examination components of this unit.

All assignments should be submitted in class at the scheduled lecture time. In the event that you are unable to attend the lecture/tutorial, assignments can be placed under the door of Room C5C-318 prior to the due date.

Penalties will be incurred for the late submission of assignments, unless satisfactory evidence of unavoidable disruption is presented. Teaching staff may refuse to mark the work of students who have a poor record of attendance or who have previously been late in submitting assignments (without satisfactory evidence of unavoidable disruption) on more than one occasion.

Details of the dates of distribution of and for submission of assignments for DEM356 are given in the Schedule of Lectures. All assignments submitted should clearly state the student's name, ID number, the name and code of the unit, the number of the assignment, and date of submission.

You will be able to bring an A-4 size sheet of paper containing formulae and a calculator with scientific functions to the final examination and the class test. **You should *always* bring the calculator with you to all lectures and tutorials in this unit.**

Dictionaries are not allowed in the exam.

Students are advised that a poor record of attendance in lectures may adversely affect the grade awarded. Satisfactory attendance in lectures and other activities may be used to determine a marginal grade. A marginal performance in the final examination will normally result in a marginal final grade being given.

The University Examination period in the Second Half Year 2005 is from 16 November to 2 December 2005. You are expected to present yourself for examination at the time and place designated in the University Examination Timetable. The timetable will be available in Draft form approximately eight weeks before the commencement of the examinations and in Final form approximately four weeks before the commencement of the examinations. <http://www.timetables.mq.edu.au/exam>

The only exception to not sitting an examination at the designated time is because of documented illness or unavoidable disruption. In these circumstances you may wish to consider applying for Special Consideration. Information about unavoidable disruption and the special consideration process is available at <http://www.reg.mq.edu.au/Forms/APSCons.pdf>

If a Supplementary Examination is granted as a result of the Special Consideration process the examination will be scheduled after the conclusion of the official examination period.

You are advised that is Macquarie University policy NOT to set early examinations for individuals or groups of students. All students are expected to ensure that they are available until the end of the teaching semester, that is the final day of the official examination period.

PLAGIARISM

The University defines plagiarism in its rules: "Plagiarism involves using the work of another person and presenting it as one's own." Plagiarism is a serious breach of the University's rules and carries significant penalties. You must read the University's practices and procedures on plagiarism. These can be found in the *Handbook of Undergraduate Studies* or on the web at: <http://www.student.mq.edu.au/plagiarism/>

The policies and procedures explain what plagiarism is, how to avoid it, the procedures that will be taken in cases of suspected plagiarism, and the penalties if you are found guilty. Penalties may include a deduction of marks, failure in the unit, and/or referral to the University Discipline Committee.

UNIVERSITY POLICY ON GRADING

Academic Senate has a set of guidelines on the distribution of grades across the range from fail to high distinction. Your final result will include one of these grades plus a standardised numerical grade (SNG).

On occasion your raw mark for a unit (i.e., the total of your marks for each assessment item) may not be the same as the SNG which you receive. Under the Senate guidelines, results may be scaled to ensure that there is a degree of comparability across the university, so that units with the same past performances of their students should achieve similar results.

It is important that you realise that the policy does not require that a minimum number of students are to be failed in any unit. In fact it does something like the opposite, in requiring examiners to explain their actions if more than 20% of students fail in a unit.

The process of scaling does not change the order of marks among students. A student who receives a higher raw mark than another will also receive a higher final scaled mark.

For an explanation of the policy see

<http://www.mq.edu.au/senate/MQUonly/Issues/Guidelines2003.doc> or
<http://www.mq.edu.au/senate/MQUonly/Issues/detailedguidelines.doc>.

STUDENT SUPPORT SERVICES

Macquarie University provides a range of Academic Student Support Services. Details of these services can be accessed at <http://www.student.mq.edu.au>.