



College of Commerce
Division of Economic and Financial Studies
Business Department

DEM356: **Demographic Techniques**

Unit Outline, 2004

Unit Co-ordinator: Dr. Fei Guo

Lecture Time: Thursday 1:05pm -- 2:55pm

Tutorial Time: Thursday 3:05pm – 3:55pm

Location: E6A-133

DEM356: DEMOGRAPHIC TECHNIQUES

Second semester 2004

Students in this unit should read this unit outline carefully at the start of semester. It contains important information about the unit. If anything in it is unclear, please consult one of the teaching staff in the unit.

ABOUT THIS UNIT

Credit Points for this unit: 3

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.

Learning Objectives and 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 STAFF

Dr. Fei Guo (Lecturer-in-charge)

Office: Room C5C-318

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Consultation Hours: Tuesday 10:30am to 12:30pm

Ms Linda Owens

Office: Room C5C-484

Phone: (02) 9850-8559

Email: lowens@efs.mq.edu.au

Consultation Hours: Tuesday 10:00 – 11:00am

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

CLASSES

Lecture/tutorial 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.*

DEM356 Schedule of lectures, Second Semester 2004

Week	Date	Topic	Lecturer	Assignment	
				Given	Due
1	5 Aug.	Introduction. Rates, ratios, life tables.	FG LO		
2	12 Aug.	Multi decrement tables and their uses. Working life tables and nuptiality tables.	LO	1	
3	19 Aug.	Testing the accuracy of demographic data.	LO		1
4	26 Aug.	Techniques of adjusting and smoothing of demographic data – I.	LO	2	
5	2 Sep.	Techniques of adjusting and smoothing of demographic data – II.	LO		2
6	9 Sep.	Class Test 1 Curve Fitting and Modelling in Demography	LO		
7	16 Sep.	Methods of estimating internal migration.	FG		
MID-SEMESTER BREAK (18 Sep. – 4 October)					
8	7 Oct.	Stable population and use of model life tables in the estimation of demographic parameters – I.	FG	3	
9	14 Oct.	Stable population and use of model life tables in the estimation of demographic parameters – II.	FG		3
10	21 Oct.	Class Test 2 Component analysis	FG	4	
11	28 Oct.	Medical demography and epidemiology – I.	JMM		
12	4 Nov.	Medical demography and epidemiology – II	JMM		4

13	11 Nov.	Conclusion and unit evaluation.	FG		
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Note: (FG) Dr Fei Guo, Lecturer-in-charge, (LO) Ms. Linda Owens, (JMM) Mr. J. M. Martins

REQUIRED AND RECOMMENDED TEXT AND OTHER MATERIALS

There is no prescribed textbook for this unit. A list of references will be 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.

REQUIREMENTS AND ASSESSMENT

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

Assessment will be based on:

- two class tests (15 percent each)
- the final examination (55 percent)
- assignments (15 percent).

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. Correct solutions will be available in ERIC in the following week after the assignment is due.

In order to pass this unit you must achieve a reasonable performance in the final examination as well as both class tests.

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 tests. You should *always* bring the calculator with you to all lectures and tutorials in this unit.

It is assumed that you are familiar with the various demographic techniques taught in DEM127: Elements of Demography. To refresh your memory you may wish to consult the book *Demographic Techniques* by A.H. Pollard, Farhat Yusuf and G.N. Pollard (in particular chapters 1-3, 5, 6 and 8).

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 two class tests and the mid-year examination.

EXAM TIMES AND TIMETABLES

The University Examination period in the Second Half of 2004 is from Wednesday 17th November to Wednesday 1 December 2004. 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 commencement of the examinations at <http://www.timetables.mq.edu.au/exam>.

ILLNESS OR UNAVOIDABLE DISRUPTION

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/APSCon.pdf>

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

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

High Distinction	(HD)
Distinction	(D)
Credit	(Cr)
Pass	(P)

Conceded Pass **(PC)**
Fail **(F)**

Your final result will include one of these grades plus a standardised numerical grade (SNG). Please note that the raw marks for a unit (i.e. the weighted average 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.

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 accessed at <http://www.student.mq.edu.au>.

MACQUARIE UNIVERSITY

Professional Authority Form

This form must be completed by a professional authority.

Students at Macquarie University are able to apply for special consideration if they are unable to attend an examination or if they consider that their examination preparation or overall performance in a unit of study has been affected by unavoidable disruption or misadventure. Special consideration may also be granted if a student is forced to leave the examination room early due to illness or unavoidable disruption and believes that his/her examination performance has been affected. In most circumstances documentary evidence is required before special consideration will be granted and your assistance in providing information on the student's illness or misadventure would be appreciated. The information you provide will allow the University to make a fair decision about the student's academic performance and will only be used to assess the student's request for special consideration. If special consideration is requested on non-medical grounds, appropriate supporting documentation must be provided, e.g. statutory declarations by independent witnesses, police reports, or statements from sufficiently senior officials in the place of employment. Photocopies of documents will not be accepted unless they have been certified by a member of the Registrar's staff.

Professional Use Only

Student's Name: _____ ID Number: _____

Date of Consultation: _____

Date/s of illness or misadventure: From: _____ To: _____

Please tick the box which best describes the student's illness or misadventure

In my opinion the effect of the illness or misadventure on the above day/s was (or will be):
Negligible () mild () moderate () severe ()

Was the student suffering from symptoms of the illness or misadventure on the date of the consultation? Yes/No
Please provide details of misadventure or illness including symptoms and the way in which the circumstances are likely to affect exam performance. Is the illness or misadventure related to or as a result of a pre-existing condition? Give details below.

Name and Title: _____

Profession: _____

ProviderNumber: _____

Signature: _____

Phone number/s: _____

Stamp or seal of Professional Authority (or attach letterhead)