

PSY 349

Design and Statistics III

S1 Day 2019

Department of Psychology

Contents

General Information	2
Learning Outcomes	3
General Assessment Information	3
Assessment Tasks	5
Delivery and Resources	9
Unit Schedule	10
Policies and Procedures	11
Graduate Capabilities	13
Changes from Previous Offering	16
Learning and Teaching Strategy	16

Disclaimer

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General Information

Unit convenor and teaching staff

Unit convenor and lecturer

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Unit convenor and lecturer

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Credit points

3

Prerequisites

(Admission to BPsych(Hons) or BBABPsych(Hons) or BComBPsych(Hons) or BPsych(Hons)BHumanSc or BPsych(Hons)LLB or BPsych(Hons)BSpHLSc or BPsych(Hons)BHlth) and 18cp in PSY units at 200 level including PSY248(P)) or (18cp from (PSY234 and PSY235 and PSY236 and PSY246 and PSY247 and PSY248) including 9cp(Cr) from (PSY234 or PSY235 or PSY236 or PSY246 or PSY247 or PSY248))

Corequisites

Co-badged status

Unit description

This unit builds on and unifies statistical and design topics introduced in previous units, particularly PSY248 Design and Statistics II. Topics include: repeated measures and mixed design ANOVA, multiple regression (linear and curvilinear); analysis of variance and covariance; and model reduction procedures. The unit also illustrates the links between these different methods through placing them in the context of the generalised linear model; in so doing the unit enhances students' understanding of statistical methods and their relationship with research design. Practical classes utilise the Stata statistical package.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

The ability to clearly and concisely communicate quantitative research results to your peers

The ability to read journal articles of primary research studies and critically review their research design and data analysis

An enhanced awareness of the connection between research design and data analytic methods

An understanding of the peculiar complexities of non-experimental research designs with respect to their data analysis and interpretation

An understanding of the framework of data analysis methods that exist within the Generalized Linear Model

An enhanced awareness of which analysis method to choose for a given research design, type of data and research question

An ability to undertake data analysis using Stata that answers practical questions in psychology research

General Assessment Information

There are 4 forms of assessment for PSY349: weekly quizzes, which involve data analysis via Stata and will be submitted online through iLearn; an optional mid-session test which will be held in computer labs and will involve data analysis in Stata; a major practical project, which will involve data analysis and communication of findings in response to a research question; and the final examination. Overall grades for the unit will be determined by adding together marks for the weekly quizzes, the practical project and the final examination. See the university policy on grading for more information.

In PSY349, we encourage students to form study groups to revise course material and practice using Stata. However, any work you submit for assessment (quizzes and the practical project) <u>must be your own</u>, including computations and written expression. In recent years we have had a number of problems with students copying other students' work and submitting as their own work. Firstly, we encourage students to discuss their work with each other, and working together can be especially beneficial for statistics. All practical projects are assessed for plagiarism via Turnitin upon submission.

It is in your interest to keep a (hard or electronic) copy of your submitted work. Firstly, to be able to produce the copy if your original goes missing, and, secondly, to be able to produce an

unmarked copy in the case of requesting a re-mark. If you request a re-mark you will need to submit an unmarked copy of your work, which will be marked by a different marker, and you will receive the revised mark which may be either higher or lower than the original mark. If you wish to request a re-mark you will need to collect a Department of Psychology Application for Re-mark form from the Faculty of Human Sciences Student Office in 4 Wallys Walk (C3A) and follow its directions.

Late Penalties

Late submission of the practical report will attract a penalty of 5% of the maximum mark for every day late. In other words, the assignment is worth 38%, so a penalty of $5\% \times 38 = 1.9$ will be applied. 1.9 marks are subtracted from whatever the student received for the report for each day late. No work can be accepted after marked project reports are handed back to students.

Requests for extensions for assignments are granted by the Faculty of Human Sciences Undergraduate Student Centre.

Examination Policy

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://students.mq.edu.au/student_admin/exams/

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, through https://ask.mq.edu.au.

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. The format of a supplementary examination is at each unit convener's discretion and is subject to change from the original final examination.

Supplementary Exams are only offered to students who have satisfactorily completed all other assessments for the unit and were unable to sit the final exam because of documented illness or unavoidable disruption.

All applications for supplementary exams should be submitted as a Special Consideration request, through https://ask.mq.edu.au. It is the student's responsibility to follow the steps outlined in this website and to submit supporting documentations with the request. This must be done within five (5) working days after the exam or test date. An email will be sent to the student advising them of the outcome of their request for a supplementary exam. If a supplementary exam has been granted, it is the student's responsibility to check the date and location of the supplementary exam although they are expected to be 11-12 July in 2019. Students who are granted to sit for a supplementary exam must make themselves available to sit for the supplementary exam on the specified date. There will only be one time. It is the student's responsibility to email Student Centre to confirm attendance at the supplementary exam.

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 that they are available until the end of the teaching semester, which is the final day of the official examination period.

Assessment Tasks

Name	Weighting	Hurdle	Due
Weekly online quizzes	12%	No	Weekly
Optional Midsession Test	10%	No	Week 6
Practical Project	38%	No	5pm 3 May, 2019
Final Exam	40%	No	University examination period

Weekly online quizzes

Due: **Weekly** Weighting: **12%**

The unit's tutorial program is vital for students to have a first-hand understanding of the material and its application in psychology research.

Each week (starting week 1) there will be a set of practical tasks to complete. Most weeks this will involve a simple, practical data analysis (involving Stata) and interpretation task, although some weeks students are given Stata output to interpret and answer some questions using the output. The requirement to complete a small on-line quiz each week will help ensure that students keep up with the unit material week-by-week. Tutors will then work through the solution during tutorial sessions in the subsequent week. Solutions to quizzes will not be made available outside of tutorial classes.

Tutorial quizzes will be worth 1% each. The final task in Week 13 will be graded but will not be reviewed in tutorials. The answers will be posted on iLearn rather than discussed in a tutorial.

Quizzes must be completed within iLearn by 5pm on the Friday before the week in which it will be discussed. The one exception to this rule is the quiz for Week 1 which must be submitted via iLearn by 5pm on Sunday 3rd March. The iLearn system will not accept submissions after that time and a mark of zero for that week will be recorded if no quiz is submitted on-time without a valid medical certificate or other documented unforseen circumstances. Each quiz is completed via iLearn and you will receive your mark on completion of the quiz. The tasks must be completed individually by each student.

If there are technical problems associated with iLearn (e.g., error message and then being unable to complete the quiz), make sure you take a screen shot of any error messages that occur. If a screen shot of an error occurring within iLearn is sent to both Mike Jones and Naomi Sweller (in a single email) before the quiz deadline, and it is deemed to be an error occurring that was out of the student's control, then a second attempt at the quiz will be granted, as long as the quiz attempt was commenced at least 2 hours before the quiz deadline and must be completed before the first tutorial session that reviews that quiz. No second attempts will be granted under

any circumstances without evidence of the glitch. Similarly, no second attempts will be granted if you begin your attempt too late and cannot complete the quiz before 5pm Friday.

It is strongly recommended you complete your quiz well in advance of the 5pm deadline!

In the event of health or other issues that may prevent you from completing the quiz by the 5pm deadline, you may apply for Special Consideration to be exempted from 1 quiz only. If further issues are experienced no further exemptions will be granted and an alternate assessment task will be set for you by Mike Jones and Naomi Sweller to replace the missed quiz.

On successful completion you will be able to:

- The ability to clearly and concisely communicate quantitative research results to your peers
- An enhanced awareness of the connection between research design and data analytic methods
- An understanding of the peculiar complexities of non-experimental research designs with respect to their data analysis and interpretation
- An understanding of the framework of data analysis methods that exist within the Generalized Linear Model
- An enhanced awareness of which analysis method to choose for a given research design, type of data and research question
- An ability to undertake data analysis using Stata that answers practical questions in psychology research

Optional Midsession Test

Due: Week 6
Weighting: 10%

PSY349 is a unit emphasising practical data analysis for psychologists and hence an assessment on practical data analysis is crucial. This is a one-hour optional e-test, which will cover the content from Weeks 1-4 of the unit. The test will involve "live" analysis of datasets in Stata, and students will be required to answer questions through the test portal relating to their analyses. Questions will be a combination of fill in the blank-style questions and multiple choice questions.

The test is optional in two respects: 1) you are not required to sit it. If you choose not to sit this test it will not affect your ability to pass PSY349. 2) It will count towards 10% of your final grade for PSY349 if performance as a percentage is higher in this test than in the final exam. The final exam will then count towards 40% of your final grade. Alternately it will not be counted towards your final grade for PSY349 (and will therefore constitute 0%) if you either do not sit the test at all, or if your performance as a percentage is lower than in the final exam. The final exam will then count towards 50% of your final grade.

The test will be conducted entirely through iLearn. All internet access on the computers used for

the test will be blocked with the exception of access to iLearn. Separate laptops / tablets / mobile phones will not be permitted in the exam room. The test is closed book and no external written or electronic materials will be permitted.

Students are required to enrol in one of the exam slots on eStudent in the same manner as you enrol in tutorials. Students will only be permitted to sit the test in the slot in which they are enrolled and must bring their student ID to the exam room for verification. If you do not enrol in one of the slots or you do not bring your student ID you will not be eligible to sit the test. Similarly if you miss your timeslot you will not be permitted to sit the test in the subsequent slot.

On successful completion you will be able to:

- An enhanced awareness of the connection between research design and data analytic methods
- An understanding of the peculiar complexities of non-experimental research designs with respect to their data analysis and interpretation
- An understanding of the framework of data analysis methods that exist within the Generalized Linear Model
- An enhanced awareness of which analysis method to choose for a given research design, type of data and research question
- An ability to undertake data analysis using Stata that answers practical questions in psychology research

Practical Project

Due: 5pm 3 May, 2019

Weighting: 38%

In the practical project, students are asked to address a practical research question and must operationalise it and determine an appropriate course of analysis with only general directions. Stata commands needed to complete the practical project will not be provided for you. You will be expected to have learnt the required Stata commands through understanding the demonstration programs used in lectures and practical assignments and through your own practice with Stata. Details of the practical project including the question and the dataset will be made available via iLearn during the mid-session break.

The practical project report must be submitted online via iLearn/Turnitin. Assignments submitted by post or emailed to tutors/lecturers will not be accepted. Marked assignments will be released via iLearn/Turnitin. Please be sure to proof read your practical project reports, as no unattached "addendums" will be accepted. Please also note that iLearn can lag when large numbers of students are uploading documents at the same time. Submission time for assignments will be counted as the time the assessment was *received*, not the time the uploading began. Because of this, make sure you don't leave your submission to 4:55pm the day it is due! Late penalties will be applied to assignments that are received after the due time.

On successful completion you will be able to:

- The ability to clearly and concisely communicate quantitative research results to your peers
- The ability to read journal articles of primary research studies and critically review their research design and data analysis
- An enhanced awareness of the connection between research design and data analytic methods
- An understanding of the peculiar complexities of non-experimental research designs with respect to their data analysis and interpretation
- An understanding of the framework of data analysis methods that exist within the Generalized Linear Model
- An enhanced awareness of which analysis method to choose for a given research design, type of data and research question
- An ability to undertake data analysis using Stata that answers practical questions in psychology research

Final Exam

Due: University examination period

Weighting: 40%

This will be a 2-hour exam conducted during the official university examination period. The exam period for Session 1, 2019 is from 12th June to 29th June, 2019. This exam will assess all course material that has been covered in PSY349, including lecture content, tutorial content and required readings.

You will be allowed to take into this exam up to 4 single-sided A4 sheets of summary notes (or 2 double-sided A4 sheets of notes), plus a calculator. These summary notes can be in any format (including hand-written, word processed, photocopied, etc - or a combination). Statistical tables will not be required. Overall the final exam will assess knowledge, but not in a rote fashion, your understanding, through interpretative tasks, and ability to apply knowledge gained to practical problem solving in psychology research. Your understanding of Stata is examinable including use of Stata syntax.

On successful completion you will be able to:

- An enhanced awareness of the connection between research design and data analytic methods
- An understanding of the peculiar complexities of non-experimental research designs with respect to their data analysis and interpretation
- An understanding of the framework of data analysis methods that exist within the Generalized Linear Model

 An enhanced awareness of which analysis method to choose for a given research design, type of data and research question

Delivery and Resources

Lectures

There are three hours of lectures per week. These lectures will be recorded via Echo360 (which captures the data projector and the lecturer's voice) and will be available on the iLearn page following the lecture.

Tutorials

There is a one hour tutorial each week starting in Week 2.

Managing Classes: Official changes to all units can be done on-line via eStudent, including tutorials. Students will be allowed to informally move between tutorial classes, provided there are spare seats after all students enrolled in that class have taken their seats. Please email the tutor of the class you wish to attend for a particular week to check.

Textbook

Agresti, A. (2018). Statistical Methods for the Social Sciences (5thed.). Boston, USA: Pearson.

Additional reading for Repeated Measures and Mixed Designs lecture:

Howell, D.C. (2012). *Statistical methods for psychology* (8th ed.). Belmont, California: Duxbury Press. [Note: the relevant sections are available in eReserve]

Additional Readings

The texts below are useful references. Students are not required to have or read these texts but may find them useful if they are wanting additional material beyond the textbook. The Weinberg and Abramowitz text is the required text for PSY248 and is particularly useful for revision of Stata which is an essential practical skill for PSY349.

Weinberg, S. L. & Abramowitz, S. K. (2016). *Statistics using Stata: An Integrative Approach* (1st ed.). New York: Cambridge University Press.

Additional readings for Week 5 lecture:

Fox, J. (2008) Bootstrapping regression models. In *Applied regression analysis and generalized linear models* (2nd ed.) (pp. 587-606). Los Angeles: Sage.

Singh, K., & Xie, M. (2008). *Bootstrap: A statistical method.* Unpublished manuscript, Rutgers University, USA. Retrieved from http://www.stat.rutgers.edu/home/mxie/RCPapers/bootstrap.pdf.

Computing

You are expected to have had prior experience in the use of Stata before coming into PSY349, and be able to read raw data files, access pre-existing data files and retrieve Stata data files. You are also expected to have some knowledge of syntax in Stata. There are several ways of accessing Stata throughout this course, including purchasing the software yourself, using

computers on campus or logging in to iLab. These options will be discussed in more detail during the first week of lectures.

You will also be expected to access the PSY349 unit Web Page at least weekly for unit notices and information regarding data files etc.

If you feel you need to brush up on your use of Stata, an introductory lecture created by Prof Mike Jones is available on iLearn and the recommended text that is also the PSY248 required text may be helpful to review.

Unit Schedule

There are three hours of lectures each week. In-person lecture attendance is not compulsory, but the lectures are considered essential to understanding the unit material so you must either attend in person, listen to the live stream, or access the recordings online. The lectures are recorded using the video Echo system which captures the data projector and the lecturer's voice. The lecture content will begin by building on PSY248 statistical modelling, with special reference to the General Linear Model (GLM). The GLM includes regression models (simple and multiple), the t-test, oneway ANOVA models, factorial ANOVA models (balanced and unbalanced), ANCOVA models and models involving statistical control with mixed measurement independent variables. For these models we will only concern ourselves with models which have one, numeric dependent variable. Following this, we will cover approaches to analysis of non-Normal dependent variables including bootstrapping and Logistic Regression (categorical DV). As our models become more complex (i.e., have increasing numbers of independent variables), we will discuss the process of model reduction. The unit finishes with an extension of ANOVA content into repeated measures and mixed within/between subject designs.

There is a one hour tutorial each week starting in Week 2. Attendance at tutorials is not compulsory, but is strongly recommended as it is the only place answers to the weekly quizzes are discussed. Quiz answers will not be available outside of tutorials.

Week by week list of topics				
Week	Week Starting	Lecture Topic	Reading	Assessment
1	25 th February	Administration An overview of the unit Introduction to multiple regression	Chapter 9 (revision) Chapter 11 (new)	Weekly quiz
2	4 th March	Generalising the right hand side of a regression model: 2-way ANOVA by regression (incl. interactions)	Chapter 12 Sections 12.1-12.4	Weekly quiz

3				
	11 th March	Generalising the right hand side of a regression model – ANCOVA	Chapter 13 Sections 13.1-13.2	Weekly quiz
4	18 th March	Generalising the right hand side of a regression model – curvilinear relationships	Chapter 14 Section 14.5	Weekly quiz
5	25 th March	Badly behaved data: outliers, transformations and bootstrapping	Section 5.5 Section 14.2	Weekly quiz
6	1 st April	Model reduction	Section 14.1 Supplementary notes	Optional mid-session test
7	8 th April	Introduction to categorical data Logistic Regression – I	Sections 8.1-8.2 Section 15.1	Weekly quiz
Monda	ay 15 th April – Fric	lay 26 th April = mid-session break		
8	29 th April	Logistic regression – II	Chapter 15	Weekly quiz Practical
			Sections 15.1-15.3	Project due Friday 5pm
9	6 th May	Paired t-test revision and introduction to repeated measures designs		Project due Friday 5pm Weekly quiz
9	6 th May	•	15.1-15.3 Howell Section	
	-	designs	15.1-15.3 Howell Section 7.4 Section 12.5 Howell	Weekly quiz
10	13 th May	designs Repeated measures designs and their analysis – I	Howell Section 7.4 Section 12.5 Howell 14.1-14.5 Section 12.5 Howell	Weekly quiz Weekly quiz

Note: See appendix of Agresti for Stata introduction and examples of all procedures

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://staff.m

q.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- · Fitness to Practice Procedure
- Grade Appeal Policy
- Complaint Management Procedure for Students and Members of the Public
- Special Consideration Policy (Note: The Special Consideration Policy is effective from 4

 December 2017 and replaces the Disruption to Studies Policy.)

Undergraduate students seeking more policy resources can visit the <u>Student Policy Gateway</u> (htt <u>ps://students.mq.edu.au/support/study/student-policy-gateway</u>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit Policy Central (https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/study/getting-started/student-conduct

Results

Results published on platform other than <u>eStudent</u>, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <u>eStudent</u>. For more information visit <u>ask.mq.edu.au</u> or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students

· Ask a Learning Adviser

Student Services and Support

Students with a disability are encouraged to contact the <u>Disability Service</u> who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Graduate Capabilities

Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

Learning outcome

 The ability to clearly and concisely communicate quantitative research results to your peers

Assessment tasks

- · Weekly online quizzes
- Practical Project

Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary

solutions to problems.

This graduate capability is supported by:

Learning outcomes

- The ability to clearly and concisely communicate quantitative research results to your peers
- The ability to read journal articles of primary research studies and critically review their research design and data analysis
- An enhanced awareness of the connection between research design and data analytic methods
- An understanding of the peculiar complexities of non-experimental research designs with respect to their data analysis and interpretation
- An understanding of the framework of data analysis methods that exist within the Generalized Linear Model
- An enhanced awareness of which analysis method to choose for a given research design, type of data and research question
- An ability to undertake data analysis using Stata that answers practical questions in psychology research

Assessment tasks

- · Weekly online quizzes
- · Optional Midsession Test
- Practical Project
- Final Exam

Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

Learning outcomes

- The ability to clearly and concisely communicate quantitative research results to your peers
- The ability to read journal articles of primary research studies and critically review their research design and data analysis

- An enhanced awareness of the connection between research design and data analytic methods
- An understanding of the peculiar complexities of non-experimental research designs with respect to their data analysis and interpretation
- An understanding of the framework of data analysis methods that exist within the Generalized Linear Model
- An enhanced awareness of which analysis method to choose for a given research design, type of data and research question

Assessment tasks

- · Weekly online guizzes
- Optional Midsession Test
- Practical Project
- Final Exam

Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

Learning outcomes

- The ability to clearly and concisely communicate quantitative research results to your peers
- An enhanced awareness of the connection between research design and data analytic methods
- An understanding of the peculiar complexities of non-experimental research designs with respect to their data analysis and interpretation
- An understanding of the framework of data analysis methods that exist within the Generalized Linear Model
- An enhanced awareness of which analysis method to choose for a given research design, type of data and research question
- An ability to undertake data analysis using Stata that answers practical questions in psychology research

Assessment tasks

- · Weekly online quizzes
- Optional Midsession Test
- Practical Project
- Final Exam

Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

Learning outcome

 The ability to clearly and concisely communicate quantitative research results to your peers

Assessment tasks

- Weekly online quizzes
- Practical Project

Changes from Previous Offering

The statistical computing platform for PSY349 has changed to Stata in 2019. This is part of a sequential rollout of Stata in statistics units in Psychology programs.

Learning and Teaching Strategy

Lecture ethics

In large (statistics) lectures noise can often be a problem. In the interest of your colleagues and the lecturer please remain quiet during lectures. It is impossible to learn while people around you are talking. Questions directed to the lecturer are encouraged but please keep talking between yourselves to an absolute minimum. If you wish to carry on a conversation with another student please leave the lecture. The lectures are electronically recorded using the Echo360 system and will be available on iLearn. If you wish to tape the lectures on your personal tape recorder please discuss your request with the unit chair. As a general rule, please turn off your mobile phone. It is not required but you may find it useful to bring your laptop to the lectures if you wish to follow along with the practical aspects of the unit.

Tutorial classes

Tutorial classes start in week 2 but there is an online quiz due on the Sunday of the first week of

semester. There is a one 1-hour tutorial class each week. Tutorials are not compulsory but tutorial material may be assessed in the final exam. Changes to all units can be done on-line via eStudent. As a general rule students are welcome to attend a tutorial session other than the one to which they are assigned as long as there are spare seats in the alternate class. If there are no spare seats and students who are allocated a seat cannot find one the tutor will ask those not allocated to that class to leave the room.

Tutors will work through the tutorial exercises and please note that solutions to online quizzes are <u>not</u> available from the tutors or unit chair. If you miss a tutorial class, it is your responsibility to arrange to see another student's solution.

Use of computers and Stata

The practical component of the unit is based on the Stata statistical package. You will be required to use Stata outside of class hours for approximately 15-60 minutes per week preparing material for practical classes. Some practical project tasks will require Stata sessions. Stata may be used interactively by tutors in practical classes to illustrate the use of the computer for statistical analysis.

Students with their own personal computers (PC or Mac) can purchase a version of Stata either from the Stata website directly or from the Australian distributor who is Survey Design and Analysis Services (https://www.surveydesign.com.au/buystudent.html). If you already own a copy of Stata and it is older than that used in lectures or tutorials do not worry, the Stata procedures used in this unit have not changed in any meaningful way for many versions. Alternately, Stata can be accessed for free by all students via the University's iLab system. For more information on the iLab system, see: https://wiki.mq.edu.au/display/iLab/About. Data files for use in tutorials will available for download from the PSY349 iLearn page under "Datasets for quizzes".

If you feel you need to brush up on your use of Stata, an introductory lecture created by Prof Mike Jones is available on iLearn and the recommended text that is also the PSY248 required text may be helpful to review.