

Staff

Position	Name	Email	Room
Lecturer-in-charge	Dr Atefeh Zamani		

Course Description

The course gives a methodological background in Multivariate Analysis as a backbone of Applied Statistics. It introduces multivariate techniques including principal component analysis; canonical correlation analysis; cluster analysis; factor analysis and discriminant analysis. Computing and data analysis features prominently in this course.

Assessment and Deadlines

Assessment	Week	Weighting %	Due date if applicable
Assignment 1	4	15%	Tuesday

5	Multivariate linear models and MANOVA; Catch-up and revision; Tests of the Covariance Matrix	Refer to Moodle
7	Factor Analysis; Structural Equation Models (overview)	Refer to Moodle
8	Classification: Discriminant Analysis and Support Vector Machines	Refer to Moodle
9	Copula Models; Clustering	Refer to Moodle
10	Catch-up; Revision; Special topics (Network Modelling)	Refer to Moodle

Textbook recommended

- x Johnson, R. & Wichern, D. (2007) Applied Multivariate Statistical Analysis. Sixth Edition, Prentice Hall.

Course Learning Outcomes (CLO)

CLO1 Use the general terminology, notation and concepts in the theory, methods and applications of Multivariate Analysis.

CLO2 Use creatively the properties of the multivariate normal distribution to justify optimality

properties of Statistics Applications 2278-28367 (SAC) - 7 (40) 2007 (w 0.25) 6 8002 e 8002 w 080 .002 Tc 0.00

School and UNSW Policies

The School of Mathematics and Statistics has adopted a number of policies relating to enrolment, attendance, assessment, plagiarism, cheating, special consideration etc. These are in addition to the Policies of The University of New South Wales. Individual courses may also adopt other policies in addition to or replacing some of the School ones. These will be clearly notified in the Course Initial Handout and on the Course Home Pages on the Maths Stats web site.

Students in courses run by the School of Mathematics and Statistics should be aware of the School and Course policies by reading the appropriate pages on the Maths Stats web site starting at:

<https://www.maths.unsw.edu.au/currentstudents/assessment-policies>

The School of Mathematics and Statistics will assume that all its students have read and understood the School policies on the above pages and any individual course policies on the Course Initial Handout and Course Home Page. Lack of knowledge about a policy will not be an excuse for failing to follow the procedure in it.

Academic Integrity and Plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW staff and students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.

The **UNSW Student Code** provides a framework for the standard of conduct expected of UNSW students with respect to their academic integrity and behaviour. It outlines the primary obligations of students and directs staff and students to the Code and related procedures.

In addition, it is important that students understand that it is not permissible to buy essay/writing services from third parties as the use of such services constitutes plagiarism because it involves using the words or ideas of others and passing them off as your own. Nor is it permissible to sell copies of lecture or tutorial notes as students do not own the rights to this intellectual property.

If a student breaches the Student Code with respect to academic integrity, the University may take disciplinary action under the **Student Misconduct Procedure**.

The UNSW Student Code and the Student Misconduct

Plagiarism

Plagiarism is presenting another person's work or ideas as your own. Plagiarism is a serious breach of ethics at UNSW and is not taken lightly. So how do you avoid it? A one-minute video for an overview of how you can avoid plagiarism can be found <https://student.unsw.edu.au/plagiarism>.

Additional Support

ELISE (Enabling Library and Information Skills for Everyone)

ELISE is designed to introduce new students to studying at UNSW.

Completing the ELISE tutorial and quiz will enable you to:

- f* analyse topics, plan responses and organise research for academic writing and other assessment tasks
- f* effectively and efficiently find appropriate information sources and evaluate relevance to your needs
- f* use and manage information effectively to accomplish a specific purpose
- f* better manage your time
- f* understand your rights and responsibilities as a student at UNSW
- f* be aware of plagiarism, copyright, UNSW Student Code of Conduct and Acceptable Use of UNSW ICT Resources Policy
- f* be aware of the standards of behaviour expected of everyone in the UNSW community
- f* locate services and information about UNSW and UNSW Library

Some of these areas will be familiar to you, others will be new. Gaining a solid understanding of all the related aspects of ELISE will help you make the most of your studies at UNSW.

The ELISE training webpages:

<https://subjectguides.library.unsw.edu.au/elise/aboutelise>

Equitable Learning Services (ELS)

If you suffer from a chronic or ongoing illness that has, or is likely to, put you at a serious disadvantage, then you should contact the Equitable Learning Services (previously known as SEADU) who provide confidential support and advice.

They assist students:

- x living with disabilities
- x with long- or short-term health concerns and/or mental health issues
- x who are primary carers
- x from low SES backgrounds
- x of diverse genders, sexes and sexualities
- x from refugee and refugee-like backgrounds
- x from rural and remote backgrounds
- x who are the first in their family to undertake a bachelor-level degree.

Their web site is: <https://student.unsw.edu.au/els/services>

