

STAT1201

Analysis of Scientific Data

Summer Semester 2022

Introduction to the course

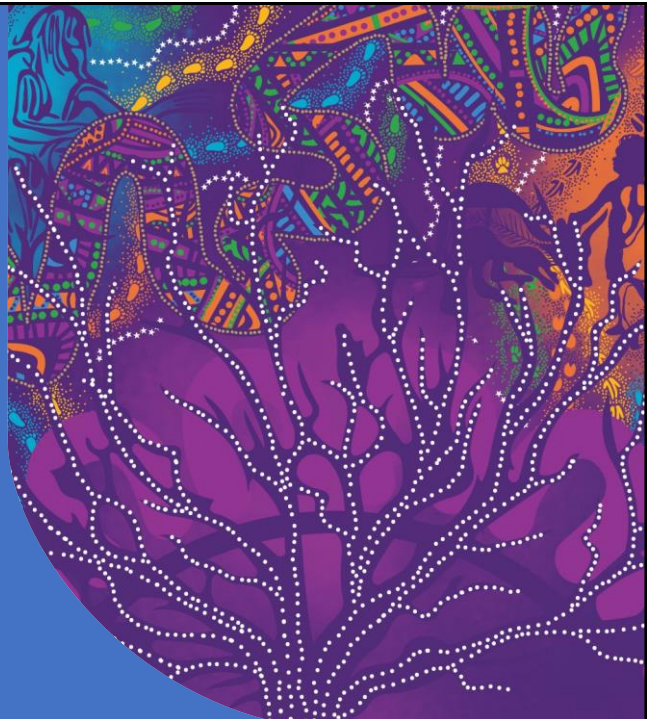
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Acknowledgement of Country

The University of Queensland (UQ) acknowledges the Traditional Owners and their custodianship of the lands on which we meet.

We pay our respects to their Ancestors and their descendants, who continue cultural and spiritual connections to Country.

We recognise their valuable contributions to Australian and global society.



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Teaching Team

Dr Wasanthi Thenuwara (Maths) Course Coordinator and Statistics Lecturer – Modules 1 – 5, 7-9, 11, 12 (Zoom ID: 818 1453 7986)

Email: w.thenuwarahennadige@uq.edu.au

Consultation:

Tuesdays 3:00 pm - 4:00 pm and Thursdays 10:00 am – 11:00 am on Zoom (818 1453 7986)
Tuesdays 10:00 am- 11:00 am and Thursdays 3:00 pm – 4:00 pm in 69-723

Dr Julian Lamont (Philosophy) Ethics Lecturer – Module 6

Masato Yamamichi (Biological Sciences) Experimental Design Lecturer – Module 10

Tutors' Information: *Please refer tutorial timetable in the Tutorials folder under Learning Resources on Blackboard.*

STAT1201 – Course Aim

(See the Electronic Course Profile - ECP)

Develop an ability to apply statistical techniques to analyse scientific data.

STAT1201 – Learning Objectives

(See the Electronic Course Profile - ECP)

- Explain the nature of scientific data and the need for statistical analysis.
- Identify factors related to the design of a scientific study, including sample size and power, the need for comparative designs, and ethical considerations.
- Identify and critically evaluate the role of data analysis and statistics in scientific research and publications.
- Demonstrate a foundational knowledge of statistical methods by being able to carry out simple statistical procedures by hand.
- Use statistical software appropriately and confidently for exploratory data analysis and to make relevant statistical conclusions.
- Plan and carry out a research project and analyse and communicate the results.

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Studying STAT1201

Blackboard is where to look!

<http://blackboard.elearning.uq.edu.au>

- ✓ Announcements, Course Profile and all administrative information about the course.
- ✓ Learning Resources
 - LearnX content
 - Lecture notes, Data files, R Codes, and recordings from the live lectures
 - RStudio
 - The Islands
 - Tutorials
 - Practice problems
- ✓ Quizzes and assignment details
- ✓ Ed Discussion board

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Assessment summary

Assessment Task	Due Date	Weighting
Computer-based Assessment Online Quizzes	15:00 each Monday	15%
Article Review Paper Review	11 Jan 23 15:00	15%
Video Research Project	25 Jan 23 15:00	20%
Exam - during Exam Period (School) Final Examination	Examination Period	50%

Refer section 5.5 of the ECP for details.

Final Exam Hurdles

If you receive less than 50% of the available marks on the Final Examination, then the maximum grade you can obtain for the course is 3. That is, to pass this course, a student must satisfy both the following requirements.

- 1) *Receive a combined total assessment mark of at least 50% from their marks from quizzes, the paper review, the research project, and the final exam.*
- 2) *Receive at least 50% for the final exam.*

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Studying STAT1201

What do we expect?

- ✓ Watch LearnX videos, reading LearnX text, complete 'Test Yourself' Questions
- ✓ Attend live lectures, take necessary notes, ask questions, answer poll questions
- ✓ Attempt additional problems and check answers
- ✓ Attend and actively engage tutorials
- ✓ Practice RStudio
- ✓ Practice to use the virtual population (The Islands) in your research and quizzes
- ✓ Complete each quiz before they close
- ✓ Work on assignments
- ✓ Engage with the Ed discussion board

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