# MATH 1030 STATISTICS FOR BUSINESS

**Credit Points 10** 

Legacy Code 200032

Coordinator Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

**Description** Statistics for Business introduces the basic concepts and techniques of statistics that are particularly relevant to problem solving in business. It also provides a sound base for more advanced study in statistics and forecasting in subsequent sessions. Topics include: presentation of data; descriptive statistics; the role of uncertainty in business decision making; hypothesis testing; and basic forecasting.

School Computer, Data & Math Sciences

**Discipline** Statistics

Student Contribution Band HECS Band 1 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current\_students/fees/) page.

Level Undergraduate Level 1 subject

Equivalent Subjects MATH 1032 Statistics for Science MATH 1028 Statistical Decision Making MATH 1003 Biometry ECON 1006 Introduction to Economic Methods MATH 1012 Management Analytics MATH 1031 Statistics for Business (WSTC) MATH 1004 Biometry (WSTC) MATH 1029 Statistical Decision Making (WSTC)

### **Assumed Knowledge**

HSC Mathematics/Mathematics Extension 1 is desirable.

## **Learning Outcomes**

On successful completion of this subject, students should be able to:

- 1. organise and summarise data numerically
- 2. recognize the foundation behind inferential statistics
- 3. identify the underlying assumptions associated with each statistical technique and interpret the results
- 4. formulate economic and financial hypotheses into statistically testable forms
- 5. manipulate, analyse and graph data using Excel
- employ the appropriate statistical methods and techniques in given situations

## **Subject Content**

Data presentation and descriptive statistics
Elementary probability
Random variables and probability distributions
Normal distributions and sampling distributions
Parameter estimation and hypothesis testing - single population
Parameter estimation and hypothesis testing - two populations
Simple linear regression analysis and correlation
Analysis of categorical data

## **Assessment**

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

<b>Type</b> Multiple Choice	Length 60 minutes	Percent 15	Threshold N	Individual/ Group Task Individual
Short Answer	3 hours	20	N	Individual
Short Answer	1.5 hours (Over 5 weeks each 30 minutes)	25	N	Group
Final Exam	90 minutes	40	Υ	Individual

### **WSU Online**

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Туре	Length	Percent	Threshold	Individual/ Group Task
Multiple Choice	60 minutes	15	N	Individual
Short Answer	3 hours	30	N	Individual
Short Answer	5 hours	25	N	Individual
Short Answer	3 hours	30	Υ	Individual

#### **Autumn Online**

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Туре	Length	Percent	Threshold	Individual/ Group Task
Multiple Choice	60 minutes	15	N	Individual
Short Answer	3 hours	30	N	Individual
Short Answer	5 hours	25	N	Individual
<b>Short Answer</b>	3 hours	30	Υ	Individual

## Prescribed Texts

 Selvanathan, E. A., Selvanathan, S., & Keller, G. (2017). Business statistics: Australia and New Zealand (7th ed.). South Melbourne, Victoria: Cengage Learning

**Teaching Periods** 

# Sydney City Campus - Term 2 (2023) Sydney City

On-site

Subject Contact Antoinette Cevenini (https://directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=MATH1030\_23-SC2\_SC\_1#subjects)

# **Spring (2023)**

## **Bankstown City**

#### On-site

Subject Contact Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=MATH1030\_23-SPR\_BK\_1#subjects)

## Campbelltown

#### On-site

Subject Contact Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=MATH1030\_23-SPR\_CA\_1#subjects)

## Parramatta City - Macquarie St

#### On-site

Subject Contact Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=MATH1030\_23-SPR\_PC\_1#subjects)

## **WSU Online TRI-3 (2023)**

### **Wsu Online**

### Online

Subject Contact Rosalind Priestman (https://

directory.westernsydney.edu.au/search/name/Rosalind Priestman/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=MATH1030\_23-OT3\_OW\_2#subjects)

# Sydney City Campus - Term 3 (2023) Sydney City

## On-site

Subject Contact Antoinette Cevenini (https://

directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=MATH1030\_23-SC3\_SC\_1#subjects)

# **Summer (2023)**

## Parramatta City - Macquarie St

#### On-site

Subject Contact Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject\_code=MATH1030\_23-SUM\_PC\_1#subjects)

## **WSU Online TRI-1 (2024)**

## **Wsu Online**

## **Online**

**Subject Contact** Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-OT1\_OW\_2#subjects)

## **Autumn (2024)**

## **Bankstown City**

#### On-site

**Subject Contact** Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-AUT\_BK\_1#subjects)

## Campbelltown

#### On-site

Subject Contact Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-AUT\_CA\_1#subjects)

## **Parramatta City - Macquarie St**

#### On-site

Subject Contact Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-AUT\_PC\_1#subjects)

#### Parramatta External

#### **Online**

**Subject Contact** Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-AUT\_PX\_2#subjects)

# Sydney City Campus - Term 1 (2024) Sydney City

### On-site

Subject Contact Antoinette Cevenini (https://

directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-SC1\_SC\_1#subjects)

# Sydney City Campus - Term 2 (2024) Sydney City

#### On-site

Subject Contact Antoinette Cevenini (https://

directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-SC2\_SC\_1#subjects)

# **Spring (2024)**

## **Bankstown City**

### On-site

**Subject Contact** Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-SPR\_BK\_1#subjects)

## Campbelltown

### On-site

**Subject Contact** Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-SPR\_CA\_1#subjects)

## Parramatta City - Macquarie St

#### On-site

Subject Contact Neil Hopkins (https://directory.westernsydney.edu.au/search/name/Neil Hopkins/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-SPR\_PC\_1#subjects)

# **WSU Online TRI-3 (2024)**

## **Wsu Online**

#### Online

**Subject Contact** Rosalind Priestman (https://directory.westernsydney.edu.au/search/name/Rosalind Priestman/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-OT3\_OW\_2#subjects)

# Sydney City Campus - Term 3 (2024) Sydney City

#### On-site

Subject Contact Antoinette Cevenini (https://directory.westernsydney.edu.au/search/name/Antoinette Cevenini/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH1030\_24-SC3\_SC\_1#subjects)