

# Unit of Study Guide: PRJ5106 Research Methodology and Data Analysis

## **Trimester 3, 2023**

#### Overview

The PRJ5106 Research Methodology and Data Analysis unit is about research methodology and data analysis and their interrelationships, including research design, ethics, sampling, and analysis. Unit topics begin with the research process, identification of appropriate research questions, and consideration of the principles of research ethics. Major research paradigms are explored along with conducting interviews and focus groups, thematic and content analysis, and survey research and descriptive statistics. Unit topics conclude with designing and conducting a program evaluation, research integrity, ethics, sampling, recruitment, and bringing it all together.

Through learning and assessment activities, students define research design, ethics, sampling, and analysis and their interrelationships; critically evaluate literature and alternative research methodologies; explain the role of ethics in applied research; and select appropriate quantitative and/or qualitative methodologies for applied research undertakings and for presenting, analysing, and interpreting data.

Course(s)Graduate Diploma of Business Administration Graduate Diploma of Project Management Master of Business Administration Master of Project Management and BusinessCore or ElectiveCore: Graduate Diploma of Project Management Master of Project Management Master of Project Management Master of Project Management and BusinessCredit Points8 credit pointsDuration12 weeks (10 teaching weeks; 1 study week; 1 final assessment week)LevelPostgraduate AdvancedStudent WorkloadStudents should expect to spend approximately 13 hours per week over 12 weeks (totalling approximately 156 hours) on learning activities for this unit.Essential RequirementsMicrosoft ExcelMode(s) of DeliveryFace to Face on site, E-learning (online), Mixed/blended, Full-time, Part- timePre-RequisitesCompletion of 24 credit pointsUnit CoordinatorDr Rakesh Khanal aquicollege.edu.au		
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Contact Information rakesh.khanal@apicollege.edu.au	Unit Coordinator	Dr Rakesh Khanal
	Contact Information	rakesh.khanal@apicollege.edu.au



On successful completion of this units, students will be able to:

ULO1 Define key elements of research and their interrelationships, including research design, ethics, sampling, and analysis.

ULO2 Critically evaluate the literature and alternative research methodologies for answering applied research questions.

ULO3 Identify and explain ethical issues that may arise in conducting applied research studies.

ULO4 Appraise, critique and synthesise the findings of previous research to justify an applied research question and a research methodology to investigate the research question.

### Weekly Schedule

Detailed information for each week's activities can be found in the unit's weekly modules in Canvas.

Week	Торіс	
Week 1	Introduction to the Research process and Expectations and Purpose	
Week 2	Major Research Paradigms	
Week 3	Conducting Interviews and Focus Groups	
Week 4	Thematic and content analysis	
Week 5	Survey Research	
Week 6	Descriptive Statistics	
Week 7	Multivariate analysis and Correlational Research Designs	
Week 8	Multivariate Analysis and Time-series and Interrupted Time-series Designs	
Week 9	Data Presentation	
Week 10	Designing and Conducting a Program Evaluation, Research Integrity, Research Ethics, Sampling and Recruitment and Bringing It All Together	
Week 11	Revision	
Week 12	Final Assessments	

#### Assessments

- 1. All assessments are compulsory.
- 2. To pass the unit students must:
  - achieve a total of 50% or more of marks offered; and
  - pass all individual invigilated assessments; and
  - have attempted all assessments.

Where one or more of these requirements are not met, the Board of Examiners will consider a student's overall progress towards meeting the unit learning outcomes and any special



- 3. The Board of Examiners may grant a supplementary assessment where a student:
  - achieves a total of 45% or more; and
  - has passed all individual invigilated assessments in the unit; and
  - has attempted all assessments; and
  - has a recommendation for supplementary assessment by the Unit Coordinator and the Head of Discipline.

Where one or more of these requirements are not met, the Board of Examiners will consider a student's overall progress towards meeting the unit learning outcomes and any special circumstances before reaching a decision. Attendance and engagement in class will be considered.

- 4. APIC awards common result grades as set out in the Award of Grade Policy.
- 5. Detailed information for each assessment can be found on the Unit's Home Page and in the Assessment Brief.

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Assessment Task	Туре	Weigh t	Length	Due	ULOs Assessed
Assessment 1: Research Plan	Individual	20%	600 words	Week	ULO1
	٢			4	ULO4
Assessment 2: Structured Literature Review Individual literature review, identify gaps and propose research questions and objectives.	Individual	20%	1500 words	Week 7	ULO1 ULO2 ULO3
Assessment 3: Research Design Identify appropriate research methods to achieve research objectives.	Individual	20%	1000 words	Week 10	ULO2 ULO3
Assessment 4: Research Proposal (Report) Construct a research proposal stating research methodology, data analysis strategy, ethical considerations.	Individual	25%	3000 words	Week 12	ULO1 ULO2 ULO3 ULO4
Assessment 5: Research Proposal Presentation Present the research proposal	Individual	15%	10 minutes presentation (equiv. 1000 words)	Week 12	ULO1 ULO2 ULO3 ULO4



Invigilated	

equiv. – equivalent word count based on the Assessment Load Equivalence Guide. It means this assessment is equivalent to the normally expected time requirement for a written submission containing the specified number of words.

#### **Course Reserves**

Course Reserve includes all required resources and reading material for the unit of study. You can access Course Reserve via <u>APIC Library</u> or via the Course Reserve link on the unit's homepage.

#### Prescribed text:

Saunders, M, Lewis, P, & Thornhill, A, 2019, *Research Methods for Business Students*, Pearson Education, Limited, Harlow.

#### **Recommended Readings:**

- Badiru, AB, 2022, Project Management for Scholarly Researchers: Systems, Innovation, and Technologies, Taylor & Francis Group, Milton, doi: 10.1201/9781003212911.
- Ewart, J & Ames, K, 2020, *Managing Your Academic Research Project*, Springer Singapore Pte. Limited, Singapore, doi: 10.1007/978-981-15-9192-1
- Fisch, C & Block, J, 2018, 'Six tips for your (systematic) literature review in business and management research', *Management Review Quarterly*, vol. 68, no. 2, pp. 103–106, doi: 10.1007/s11301-018-0142-x.
- Moreno-Monsalve, NA, Diez-Silva, HM, Diaz-Piraquive, FN, & Perez-Uribe, RI, 2020, Handbook of Research on Project Management Strategies and Tools for Organizational Success, IGI Global, Hershey.
- Paul, J & Criado, AR, 2020, 'The art of writing literature review: What do we know and what do we need to know?', *International Business Review*, vol. 29, no. 4, p. 101717–, doi: 10.1016/j.ibusrev.2020.101717.
- Xiao, Y & Watson, M, 2019, 'Guidance on Conducting a Systematic Literature Review', *Journal of Planning Education and Research*, vol. 39, no. 1, pp. 93–112, doi: 10.1177/0739456X17723971.

#### Other Recommended Resources:

Sage Research Methods: https://methods.sagepub.com/ Business Research Methodology: https://research-methodology.net/ Research Methods Resources: https://researchmethodsresources.nih.gov/ Project Management Institute: <u>https://www.pmi.org/</u>



## **Academic Integrity**

Ethical conduct and academic integrity and honesty are fundamental to the mission of APIC and academic misconduct will not be tolerated by the College. It is the responsibility of every student to make sure that they understand what constitutes academic misconduct and to refrain from engaging in it. Please refer to APIC's <u>Academic Integrity Policy</u> for further details.

### **Other Important Information and Links**

Special consideration	Late submission
If your academic work is impacted by significant documented illness, hardship, or other adverse circumstances beyond your control, you may make an application for Special Consideration. Please refer to the <u>Assessment Policy</u> for further details.	Penalties apply when work is submitted after the due date without approval. Please refer to the <u>Assessment Policy</u> for information about late submission.
<b>Assessment appeals</b> If you are concerned about a mark you have received for an assessment or final grade, you may apply to formally appeal the grade. Please see the <u>Assessment Policy</u> for further details.	<b>Award of grades</b> APIC awards common result grades, set out in the <u>Award of Grade Policy</u> .
<b>Expectations of student conduct</b> Students are expected to conduct themselves in a manner that is consistent with a safe and respectful study environment. More information can be found in the <u>Student Code</u> <u>of Conduct</u> .	<b>Study resources</b> APIC Library and Student Learning Support resources and services can be accessed via the <u>Student Lounge</u> or your <u>Dashboard on the OLS</u> (Canvas).
<b>Student Services</b> The Student Services team provides administrative support for students and handles enquiries about enrolment, timetables, important dates and submitting forms. More information can be found on the <u>Student</u> <u>Services page on the OLS (Canvas)</u> .	<b>Key dates</b> Key dates through the academic year, including teaching periods, census, payment deadlines and exams can be found on the <u>Academic</u> <u>Calendar</u> section of the APIC website.

## Changes and Updates to the Unit of Study Guide

This Unit of Study Guide may be updated and amended from time to time. Students will be notified of any changes to the unit via the Online Learning System (Canvas) space for the unit. This Unit of Study Guide was last modified on 20<sup>th</sup> September 2023.