USC

COURSE OUTLINE

PSY704 Advanced Research Design and Methods

Course Coordinator: Prudence Millear (pmillear@usc.edu.au) **School:** School of Health and Behavioural Sciences

2021 | Semester 2

Thompson Institute

BLENDED LEARNING Most of your course is on campus but you may be able to do some components of this course online.

Please go to the USC website for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

The USC postgraduate psychology programs are committed to maintaining the primacy of public safety in the delivery of the program within the education and placement environments. This course extends students' previous studies by providing a guide to clinical research methods. In recognising the Scientist Practitioner Model, there is a focus on research design with practical implications for clinical practice and on critical use of the research literature to guide Evidence Based Practice. The course will also provide theoretical and practical content relevant to the design of a Masters level clinical research thesis. Assessment will focus on the critical appraisal of relevant literature and the ability to apply theoretical understanding to the design and implementation of clinically based research.

1.2. How will this course be delivered?

ACTIVITY	HOURS	BEGINNING WEEK	FREQUENCY
BLENDED LEARNING			
Tutorial/Workshop 1 – On campus workshop	3hrs	Week 1	12 times

1.3. Course Topics

The scientist-practitioner model: standards and why these are important to clinical practice

The boundaries of measurements: reliability, validity, effect sizes, and treatment integrity and fidelity

The boundaries of sample size: size and usefulness of samples

Quantitative analyses: comparing samples and analysing relationships between variables

Qualitative analyses: written and spoken records as units of analyses

Analysising previous research: Systematic reviews and meta-analyses

Failures of research ethics and researcher competence

2. What level is this course?

700 Level (Specialised)

Demonstrating a specialised body of knowledge and set of skills for professional practice or further learning. Advanced application of knowledge and skills in unfamiliar contexts.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

COURSE LEARNING OUTCOMES	GRADUATE QUALITIES
On successful completion of this course, you should be able to...	Completing these tasks successfully will contribute to you becoming...
1 Demonstrate advanced knowledge and understanding of recent developments in clinical research methodology and design.	Knowledgeable
2 Demonstrate an ability to access and, critique methodological strategies relevant to clinical research, and the ability to present, compare and contrast such methodologies in a cogent manner through professional presentations and materials.	Creative and critical thinker Empowered

5. Am I eligible to enrol in this course?

Refer to the USC Glossary of terms for definitions of "pre-requisites, co-requisites and anti-requisites".

5.1. Pre-requisites

Enrolled in Program AR702 or AR703

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Fundamentals of Statistical Methods and Analysis

6. How am I going to be assessed?

6.1. Grading Scale

Limited Grading (PNP)

Pass (PU), Fail (UF). All assessment tasks are required to be passed for successful completion of the course.

6.2. Details of early feedback on progress

You should discuss the topic of your Clinical Decision Making presentation with the Course Coordinator prior to commencing preparation on any of your presentations. These discussions and the presentations of other students will give your feedback on the nature and content of the work. You will be able to use the feedback from the Clinical Decision Making presentation to guide your efforts for the best Practice Guide and for later presentations.

6.3. Assessment tasks

DELIVERY MODE	TASK NO.	ASSESSMENT PRODUCT	INDIVIDUAL OR GROUP	WHAT IS THE DURATION / LENGTH?	WHEN SHOULD I SUBMIT?	WHERE SHOULD I SUBMIT IT?
All	1	Activity Participation	Individual	20 minutes	Refer to Format	In Class
All	2	Artefact - Technical and Scientific, and Written Piece	Individual	Executive Summary: 150-180 words Best Practice Guide: 2000 to 2500 words Excludes title page and references	Week 13	Online Assignment Submission with plagiarism check

All - Assessment Task 1: Clinical decision-making presentation

GOAL:	The goal of this assessment is to communicate your understanding of research about current treatments for particular psychological disorders, through an oral presentation and a handout that demonstrates the decision-making process
PRODUCT:	Activity Participation
FORMAT:	You will present the information in two parts, first, as an oral presentation (15 minutes + 5 minutes for class discussion) and second, as a two page summary of the articles and your conclusions.
	Consider you are now working in an organisation and have been asked to share with your colleagues about recent research (i.e., last 5 years) on treatments for a particular psychological disorder or condition. You will select three recent empirical articles about the same disorder or condition and demonstrate how you would select the most suitable treatment for a client with that disorder or condition. You will demonstrate how knowledge of statistics can be used to guide a clinician's decision-making process in how to choose one treatment over another.
	You should focus on the treatment of specific populations, such the elderly, Indigenous and Torres Strait Islanders, people with an intellectual disability, migrants, refugees, people living in rural and remote Australia, and LGBTIQ and minority groups. You should include the prevalence of the disorder and efficacy of treatment and include some or all of the following statistical issues: effect size of the treatments, power, Type I and II errors, sample size, statistical and practical significance of the results, the ethics of the research design, the use of CONSORT diagrams, treatment integrity and fidelity, and qualitative and quantitative design and methods in research.
	The handout should give the full citation and summarise each article and be easy to understand, practically useful, and have a conclusion of preferred treatment. The handouts from all students will be combined to provide a resource for students in the future.
	You should discuss the topic of your clinical decision-making presentation with the Course Coordinator prior to commencing preparation of your presentation.

CRITERIA:	No.		Learning Outcome assessed
	1	Explanation and understanding of psychological disorder or condition	②
	2	Explanation and understanding of the statistics used in the research articles and issues that apply to assessing effectiveness of psychological treatments	①
	3	Clarity of the decision-making process using the statistics	②
	4	Ability to synthesise outcomes of research with clinical practice	① ②
	5	Recommendations for treatment, based on research that is presented	②
	6	Design and content of the handout, including summaries of the articles and conclusions	① ②

All - Assessment Task 2: Best Practice Guide

GOAL:	The goal of this assessment is to communicate your understanding of research about current treatments for particular psychological disorders. This assessment will be a capstone experience in your training as a scientist-practitioner, in that you will gather and synthesise evidence for treatment options, and through the preparation of a Best Practice Guide to communicate this evidence for organisations and allied health professions.
PRODUCT:	Artefact - Technical and Scientific, and Written Piece
FORMAT:	The Best Practice Guide will follow from the work you have done on Task 1 Clinical Decision-Making presentation. You will write a guide for psychologists and other allied health professionals (e.g., social workers, speech pathologists, occupational therapists, physiotherapists, nurses, and medical professionals) on the psychological disorder that you covered in Task 1.
	You should focus on the treatment of these specific populations, such the elderly, Indigenous and Torres Strait Islanders, people with an intellectual disability, migrants, refugees, people living in rural and remote Australia, and LGBTIQ and minority groups.
	The Best Practice guide will be presented as an executive summary (i.e., an abstract) of 150 to 180 words and the guide of 2000 to 2500 words (excluding title page and reference list).
	You should discuss the topic of your clinical decision-making presentation and Best Practice Guide with the Course Coordinator prior to commencing preparation for these tasks.
	The Best Practice Guide will consist of four sections:
	• First, identification of the professional group to which you are directing the Best Practice Guide, the background to the disorder (e.g., prevalence, costs), and an explanation of the types of interventions and treatments that are commonly or usually considered for the disorder, using appropriate theoretical perspective/s and including relevant research literature applied to the disorder
	• Second, a brief overview of the strategies that can be used by practitioners to assess quality of evidence (e.g., statistical considerations to be used)
	• Third, the comparisons of the three different types of treatments or intervention as a comparison of research articles that demonstrate these treatments or interventions, and which will include a risk of bias assessment to show the quality of the articles; and
	• Fourth, your conclusions for incorporating the findings into multidisciplinary teams and practice, and consideration of areas for future research on the disorder

CRITERIA:	**No.**		**Learning Outcome assessed**
	1	Explanation and understanding of psychological disorder or condition within the clinical practice of multidisciplinary teams	②
	2	Appropriateness of theoretical perspective and research literature applied to the disorder	① ②
	3	Explanation and applicability of treatment options or interventions	②
	4	Explanation and assessment of the quality of the research and application of risk of bias tools	①
	5	Explanation and understanding of the statistics used in the research articles and issues that apply to assessing effectiveness of psychological treatments	① ②
	6	Clarity of explanation of the decision-making process using the statistics	① ②
	7	Recommendations for treatments or interventions that are appropriate for the disorder	②
	8	Evidence of critical analysis and original thinking and use of formal academic language	②

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Directed study hours may vary by location. Student workload is calculated at 12.5 learning hours per one unit.

7.1. Schedule

PERIOD AND TOPIC	ACTIVITIES
Week 1: Scientist-Practitioner model	Readings and class discussions
Week 2: Boundaries of good research and design	Readings and class discussions
Week 3: Boundaries of good research and design	Readings and class discussions
Week 4: Boundaries of good research and design	Readings and class discussion, Task 1 presentations
Week 5: Quantitative research methods	Readings and class discussions, Task 1 presentations
Week 6 Quantitative research methods	Readings and class discussion, Task 1 presentations
Week 7 Qualitative analyses	Readings and class discussions, Task 1 presentations
Week 8: Combining previous research studies in systematic reviews and meta-analyses	Readings and class discussions, Task 1 presentations
Week 9: Combining previous research studies in systematic reviews and meta-analyses	Readings and class discussions, Task 1 presentations
Week 11: Failures of research ethics and competence	Readings and class discussions, Task 1 presentations
Week 12: failures of research ethics and competence	Readings and class discussions, Task 1 presentations
Week 13: Conclusions and future directions in clinical practice	Class discussions, Task 1 presentations

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Blackboard site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

> There are no required/recommended resources for this course.

8.2. Specific requirements

Students should download the GPower program on to their personal computer (not the university computers) for their own use. This is the link for the download: http://www.psycho.uniduesseldorf.de/abteilungen/aap/gpower3/download-and-register

Information regarding prescribed readings, texts or other associated resources will be made available on the BlackBoard site prior to commencement of study.

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the online induction training for students, and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Blackboard, are electronically checked through SafeAssign. This software allows for text comparisons to be made between your submitted assessment item and all other work that SafeAssign has access to.

10.2. Assessment: Additional Requirements

Limited Graded Course:

This course will be graded as Pass in a Limited Grade Course (PU) or Fail in a Limited Grade Course (UF) as per clause 4.1.3 and 4.1.4 of the Grades and Grade Point Average (GPA) - Institutional Operating Policy of the USC.

In a course eligible to use Limited Grades, all assessment items in that course are marked on a Pass/Fail basis and all assessment tasks are required to be passed for a student to successfully complete the course. Supplementary assessment is not available in courses using Limited Grades.

10.3. Assessment: Submission penalties

You must contact your Course Coordinator and provide the required documentation if you require an extension or alternate assessment.

10.4. Study help

For help with course-specific advice, for example what information to include in your assessment, you should first contact your tutor, then your course coordinator, if needed.

If you require additional assistance, the Learning Advisers are trained professionals who are ready to help you develop a wide range of academic skills. Visit the Learning Advisers web page for more information, or contact Student Central for further assistance: +61 7 5430 2890 or studentcentral@usc.edu.au.

10.5. Wellbeing Services

Student Wellbeing provide free and confidential counselling on a wide range of personal, academic, social and psychological matters, to foster positive mental health and wellbeing for your academic success.

To book a confidential appointment go to Student Hub, email studentwellbeing@usc.edu.au or call 07 5430 1226.

10.6. AccessAbility Services

Ability Advisers ensure equal access to all aspects of university life. If your studies are affected by a disability, learning disorder mental health issue, , injury or illness, or you are a primary carer for someone with a disability or who is considered frail and aged, AccessAbility Services can provide access to appropriate reasonable adjustments and practical advice about the support and facilities available to you throughout the University.

To book a confidential appointment go to Student Hub, email AccessAbility@usc.edu.au or call 07 5430 2890.

10.7. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Administration of Central Examinations
- Deferred Examinations
- Student Academic Misconduct
- Students with a Disability

Visit the USC website: http://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching

10.8. General Enquiries

In person:
- **USC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **USC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **USC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **USC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **USC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **USC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au