Course specification

Description: Research Methods in Psychology B

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-nbr</th>
<th>Class</th>
<th>Term</th>
<th>Mode</th>
<th>Units</th>
<th>Campus</th>
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<tr>
<td>PSY</td>
<td>2110</td>
<td>44412</td>
<td>2, 2005</td>
<td>EXT</td>
<td>1.00</td>
<td>Toowoomba</td>
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Academic group: FOSCI
Academic org: FOS005
Student contribution band: 1
ASCED code: 090701

STAFFING
Examiner: Tony Machin
Moderator: Yong Goh

REQUISITES
Pre-requisite: PSY2100

RATIONALE
The discipline of psychology is based on a solid foundation of scientific research. Researchers use a variety of conceptual, logical and mathematical tools to reduce uncertainty in the state of psychological knowledge. This course introduces more advanced research methodologies and mathematical tools.

SYNOPSIS
This course builds upon the basic methods and tools of psychological research, extending the range and complexity of questions which can be addressed. A wide diversity of research designs are introduced including non-reactive techniques, complex experimental and quasi-experimental designs and single-subject designs as ways of answering specific questions and dealing with potential confounds. The statistical and analytic tools associated with these more advanced techniques are also explored including factorial analysis of variance, and analytic comparisons.

OBJECTIVES
On successful completion of this course students will be able to:

1. describe different research designs, identify when it is appropriate to use them, and discuss their limitations;
2. describe different statistical techniques, identify when it is appropriate to use them, and discuss their limitations;
3. evaluate the appropriateness of the research design and statistical analysis used in selected examples in published research;
4. write a properly formatted results section of the type found in Psychology journals that correctly interprets and explains both descriptive and inferential tests;
5. identify the ethical guidelines researchers must follow and describe how researchers apply ethical decision making to resolve complex ethical issues.

TOPICS

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
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<tbody>
<tr>
<td>1. Power Factors affecting power Computation of power Power Analysis</td>
<td>10.00</td>
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<tr>
<td>2. Multiple Comparisons Family-wise error A Priori vs post-hoc comparisons</td>
<td>15.00</td>
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<tr>
<td>3. Complex ANOVA Designs Underlying logic of complex designs Plot, identify and interpret interactions Simple effects, and main effects ANOVA computations in complex designs</td>
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<td>4. Repeated Measures Designs Underlying Logic Controlling variation Counterbalancing</td>
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<tr>
<td>5. Single Case Research Designs Introduction to case study method Single (N=1) designs</td>
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<tr>
<td>6. Quasi-experimental Designs Experiments in natural settings Experiments and quasi-experiments Some different designs Programme evaluation</td>
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<td>7. Ethical issues in research.</td>
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TEXT and MATERIALS required to be PURCHASED or ACCESSED

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at http://bookshop.usq.edu.au click 'Semester', then enter your 'Course Code' (no spaces).


REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.


STUDENT WORKLOAD REQUIREMENTS

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
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<tr>
<td>Assessment</td>
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<tr>
<td>Directed Study</td>
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<tr>
<td>Examinations</td>
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<td>Private Study</td>
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ASSESSMENT DETAILS

<table>
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<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
<th>Due date</th>
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<tbody>
<tr>
<td>ASSIGNMENT 1</td>
<td>20.00</td>
<td>20.00</td>
<td>06 Sep 2005</td>
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<tr>
<td>ASSIGNMENT 2</td>
<td>25.00</td>
<td>25.00</td>
<td>10 Oct 2005</td>
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<tr>
<td>MULTICHOICE 3 HR RES EXAM PT A</td>
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<td>30.00</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(see note 1)</td>
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<tr>
<td>3 HR RESTRICTED EXAM PARTS B&amp;C</td>
<td>25.00</td>
<td>25.00</td>
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NOTES

1. Examination dates will be available during the Semester. Please refer to the examination timetable when published.
IMPORTANT ASSESSMENT INFORMATION

1 Attendance requirements:
   It is the student's responsibility to participate actively in all course activities and to
   study all course materials, so as to be informed of all course academic and administrative
   actions and policies, and to maximize his/her chance of meeting the objectives of the
   course.

2 Requirements for students to complete each assessment item satisfactorily:
   The student must obtain at least half of the marks available on each assignment, and at
   least half of the marks available in the final examination.

3 Penalties for late submission of required work:
   An assignment that is submitted after the due date without an extension approved by
   the Examiner, will draw a penalty of 20 percent of the available marks for each day (or
   part thereof) that assignment is late. (e.g., an assignment that is submitted three days
   will be penalized 60% of the available marks.)

4 Requirements for student to be awarded a passing grade in the course:
   To be assured of a pass in this course, the student must: (1) obtain an overall mark of
   at least 50%; (2) obtain a total mark of at least 50% in Part A, Part B & Part C of the
   examination. Students who do not qualify for a passing grade may, at the discretion of
   the examiner, be awarded a supplementary exam. It is expected that students will have
   gained at least 50% of the total marks available for all summative assessment items.

5 Method used to combine assessment results to attain final grade:
   The final grade will be determined by the addition of the marks obtained on each
   assignment and the examination, weighted as indicated in the Assessment Details.

6 Examination information:
   In a Restricted Examination, candidates are allowed access to specific materials during
   the examination. The only materials that candidates may use in the restricted examination
   for this course are: calculators which cannot hold textual information (students must
   indicate on their examination paper the make and model of any calculator(s) they use
   during the examination. A list of the materials candidates may use in the examination
   will be on the front of the examination paper.

7 Examination period when Deferred/Supplementary examinations will be held:
   Supplementary examinations may be offered in this course at the discretion of the
   examiner. If a deferred or supplementary exam is granted, it will be held during the
   examination period at the end of the semester of the next offering of this course.

8 University Regulations:
   Students should read USQ Regulations 5.1 Definitions, 5.6. Assessment, and 5.10
   Academic Misconduct for further information and to avoid actions which might contravene University Regulations. These regulations can be found at the URL
   http://www.usq.edu.au/corporateservices/calendar/part5.htm or in the current USQ
   Handbook.

ASSESSMENT NOTES

9 The due date for an assignment is the date by which a student must despatch the
   assignment to the USQ. The onus is on the student to provide proof of the despatch
   date, if requested by the Examiner.

10 Students must retain a copy of each item submitted for assessment. This must be
    produced within five days if required by the Examiner.
11 The examiner may grant an extension of the due date of an assignment in extenuating circumstances.

12 The Faculty will normally only accept assessments that have been written, typed or printed on paper-based media.

13 Students who do not have regular access to postal services or who are otherwise disadvantaged by these regulations may be given special consideration. They should contact the examiner of the course to negotiate such special arrangements.

14 A request for a deferred examination will be considered only if the student has obtained a minimum passing grade (50%) on each of the course assignments.