

WINONA STATE UNIVERSITY
FORM FOR PERMISSION FOR ONE-TIME COURSE OFFERING

Type one copy only. After form is signed, the Dean's Office will make copies and distribute as follows: Original to Dean and copies to Department Chairperson, A2C2, and Registrar; additional copies to Graduate Council and Graduate Dean for graduate courses.

Date: 9.16.13

Department: Psychology

Course Number: 351

Course Title: Advanced Statistics and Research Method Designs in Psychology

Credits: 3

Prerequisites: *Psy210 – Introduction to Psychology; Psy231 – Psychological Statistics*

To be required for Major ____ (B.A.), ____ (B.S.): for Minor ____ (B.A.), ____ (B.S.)

Elective x .

Elective counts toward Major x , Minor x , Certification ____.

Type of Grading: x Grade Only or ____ P/NC Only or ____ P/NC option

Term and year to be offered: Spring 2014

Give Title, brief description and content of the course:

Title: Advanced Statistics and Research Method Design in Psychology

Description: This course offers the opportunity to advance basic statistical skills by conducting, analyzing, and interpreting common advanced statistical procedures and techniques used in the behavioral sciences, specifically in the applied area of psychology. The objective of the course is to enable students to appropriately use statistical software packages (mainly SPSS) to analyze and interpret statistical information. Topics include multiple regression, ANOVAs (simple, repeated measures, and factorial), ANCOVAs, and mediation/moderation analyses. An introduction to qualitative data analysis is also offered. Emphasis of this course will be on understanding, application, use of SPSS, and interpretation of statistical methods used in psychology.

Content/Learning Outcomes:

By the end of this course, you will be able to use SPSS to:

1. Define, explain, and apply basic and advanced descriptive and inferential statistical procedures:
 - a. Compute and interpret measures of central tendency and variability
 - b. Summarize the normal distribution and use it to compute z-scores
 - c. Compute and interpret correlations coefficients (including partial and semi-partial coefficients)
 - d. Compute and interpret multiple regression equations (including dummy coding and interaction effects)
 - e. Describe, compute, and interpret mediation and moderation analyses
 - f. Summarize the logic and computation of one-way ANOVAs
 - g. Describe and compute planned contrast tests and post-hoc analyses for one-way ANOVAs
 - h. Describe and compute ANCOVAs, factorial designs, and repeated measures ANOVAs
 - j. Explain the purpose and methods of qualitative research
2. Critically evaluate, formulate, conduct and interpret conclusions drawn from statistics inference
 - a. Explain why and how each statistical model is used in psychological research methods
 - b. Interpret and report the results of statistical tests using the conventions of the American Psychological Association
3. Demonstrate the ability to comfortably analyze and interpret data using SPSS

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Indicate why it is important to offer this course:

This course is important to students' development and advancement of knowledge of core concepts in the field of psychology. Students will not only continue to advance their critical analysis skills, but also advance their fluency in the communication style of the psychology discipline. That is, students will learn to read, write, and analyze statistical reporting that is consistent with the standards of the psychology discipline. The course is also an important contribution to the breadth and depth of courses provided by the psychology department. The department currently offers introductory courses in statistics and several courses designed to advance understanding in experimental methods. This course will complement existing courses by building from the foundational knowledge learned in these courses to advance students' knowledge in methodology, design and analysis specific to the field of psychology. Furthermore, students will have an opportunity to learn how to use and interpret SPSS, the statistical program widely used in the field of psychology. Previous courses provide brief introductions and some students learn more about its use in independent studies, but not all students have a chance to use and explore SPSS for advanced statistical procedures to a degree that they will be able to comfortably use it in future work with psychological research. In addition to serving students within our own department, the course is also important for students outside our department seeking a chance to learn about statistics as applied to research and design in psychology. Finally, this course is important because it supports one of the main goals of the Psychology department, to prepare our students for graduate study. A course in advanced statistics and design will allow students to become more competitive and prepared for graduate-level research design and statistical analyses that are essential to success in psychology-specific graduate school programs.

Department action at meeting date (Attach Minutes): September 11, 2013 (see attached meeting notes)

Will this course require additional funding? ☐ Yes ☒ No

Will this course require additional staff? ☐ Yes ☒ No

Approve
Disapprove

Department Chairperson

Date

Approve
Disapprove

College Dean

Date

Approve
Disapprove

Graduate Dean

Date

NOTE: This authorizes the offering of this course *only once*. One-time course offerings may be offered for University Studies credit only if they are approved by the University Studies Subcommittee and A2C2. If the Department wishes to offer it again, approval must be given according to the prescribed procedures, using the *New Course Proposal Form*.

SL - 30062 (Dean)

Revised 9-12-96(4-13-05 by A2C2)

Psychology Department Meeting

Date: September 11, 2013

Attending: J Johanson, J Holden, A Brouwer, R Casselman, R Deyo, G Marmolejo, C Schreiber, J Siebenbruner, C Fried, R Foster

Housekeeping: Minutes from previous meeting (08/13/2013) were approved.

Additions to Agenda

- 1) Changes to the CAST program
 - a. Many changes are being made in an effort to strengthen the CAST program.
 - i. Better integrating psychology is a priority.
 - ii. In general, working to re-develop a strength-based, prevention-oriented, interdisciplinary program rather than focusing primarily on prosecution aspect of child abuse.
 - b. Working on hiring director for CAST with goals of possibly adding other faculty in the future
 - i. Currently have one instructor and an interim director
 - c. CAST wants to include psychology in curriculum, as is done in other CAST programs around the country
 - i. Ongoing discussion regarding whether to add child development modules to the existing CAST curriculum versus making child development or other developmental course a requirement for CAST students.
- 2) Writing across the Curriculum
 - a. A Bouwer is going to participate in these meetings
 - b. Focus for this academic year is to place priority on writing goals for departments/areas of specialization versus individual student needs
 - c. Discussed scientific writing/APA-style writing as goal for our department
 - d. Discussed possibility developing a voluntary non-credit workshop for students that would focus on these topics
 - i. Several weeks or semester long
 - ii. Targeting sophomores and juniors
 - iii. Would need faculty to volunteer time to running workshops
 - e. Would be good to conceptualize as graduate school preparation to peak student interest
 - f. Some courses provide substantial training on APA formatting but would be good to expose students earlier in their education and provide multiple exposures to increase learning
 - g. Will continue to discuss this in future meetings

Informational Items

- 1) Spring Schedule
 - a. Spring 2014 schedule should be online by 10/01/2013
 - b. Was online briefly but needed to be revised so was taken down
 - c. New provost has discussed wanting to avoid under-enrolled upper division courses
- 2) Summer Schedule due from Department to Registrar by 10/01/2013
 - a. Most have already responded with requests for summer teaching
 - b. Good assortment of courses to be offered, seems to work well with student needs
- 3) Status of proposal of new faculty line
 - a. Proposal signed by R Townsend and sent on to Provost
 - b. R Townsend added additional justification to the proposal

- 4) Status of minor renovations to PH215
 - a. Not yet completed but on the list of things that need to be done
- 5) New language in 22.E.2 of contract regarding PDRs
 - a. States that "Departments will provide written comments on the report..."
 - b. We are already doing this, so we will continue what we have been doing.
 - c. Need to send all comments to the dean with PDR, can no longer choose which ones to send based on faculty preference
 - o Other departments and universities doing things differently so this is an attempt to standardize the process.

Action Items

- 1) Opportunity to co-sponsor "Marx in SOHO"
 - a. Sociology program sponsoring a play in conjunction with the University Theme of Civic Action.
 - b. They wanted to know if we wanted to provide financial contribution to sponsor the program. We unanimously voted against this.
- 2) One-time Course Offering for Spring 2014
 - a. A Brouwer has presented proposal/sample syllabus for this course offering
 - b. Unanimously voted in favor of the course offering (10 in favor, no abstentions, no opposed)
 - c. Still discussing possible titles for the course. Possibilities include "Advanced Psychological Analysis and Design" or "Advanced Research Design and Analysis"
 - d. Discussed possibilities for offering the course on a more regular basis
 - e. Will allow this class to serve as a course substitution for the advanced statistics requirement for PSY B majors
- 3) PSY GPA vs. Major GPA
 - a. Having both GPAs is causing problems with DARS
 - b. Discussed difference between PSY GPA and Major GPA
 - c. Unanimously voted in favor of getting rid of PSY GPA and using Major GPA for graduation requirement (10 in favor, no abstentions, no opposed)
- 4) Proposed new Honors criteria
 - a. Need to change wording to "Major GPA" from PSY GPA based on Item #3 above
 - b. Discussed service component
 - i. Service requirement as okayed by advisor, do not need documentation
 - ii. Internship does not count as service requirement
 - c. Need to better advertise this to our majors
 - i. Will post new requirements on announcement board, around department, post to department website and in WSU catalog
 - a. Unanimously voted in favor of new Honors Criteria (10 in favor, no abstentions, no opposed)

Other: Psych Club Pot Luck – 3:30 to 5:50 on 09/19/2013

Meeting Adjourned: 3:45 PM , meeting minutes recorded and submitted by R Foster