# WINONA STATE UNIVERSITY GENERAL EDUCATION PROGRAM APPROVAL FORM

Routing form for General Education Program Course approval.		Course PSY 308
Department Approval Department Chair 3 Date	e-mailaddress	nson & Windnaldu
		iducation Program Subcommittee
GEPS Recommendation Approved	Disapproved	
Chair, General Education Program Subcommittee	Date	
A2C2 Recommendation Approved	Disapproved	
Chair of A2C2 Date	3	
Faculty Senate Recommendation Approv	ved Disapproved	
President of Faculty Senate Dat	e	
Academic Vice President Recommendation	_ Approved Disapproved	
Academic Vice President Dat	e	
Decision of President Approved	Disapproved	
President Dat	e	
Please forward to Registrar.		
Registrar Plea Date entered	se notify department chair via e-mail that currie	cular change has been recorded.

[Revised 10-22-12]

# WINONA STATE UNIVERSITY PROPOSAL FOR GENERAL EDUCATION PROGRAM COURSES

partment Psychology			Date	
PSY308	Experimental Psychology		3	
Course No.	Course Name		Credits	
Pre	erequisites PSY 210, 231, ENG 111 or	112, Concurrent enrollmen	nt in 309	
EP Goal Area(s):*				
CORE GOAL AREAS				
Goal 1: Communicati		THEME	GOAL AREAS	
Goal 3: Natural Scien		Go	al 7: Human Diversity	
Goal 4: Mathematics/		Go	al 8: Global Perspective	
	he Social and Behavioral		al 9: Ethical and Civic Responsibility	
Sciences		Go	al 10: People and the Environment	
Goal 6: The Humanit	ies and Fine Arts			
* Courses may be subm	nitted for up to two Goal Areas			
dditional Requirement Car	tegories (list number of credits	desired in appropri	iate category):	
Intensive:				
v intensive:	1. Writing			
	2. Oral Commu	nightion		
	3a. Mathematic			
	3b. Critical An			
	JU. Childar Ali	alysis		
Physi	ical Development and Wellnes	S		
rovide information as spec	ified in the previous directions			
Attach a General Education	n Program Approval Form.			
Department Contact Person	for this Proposal:			
Carrie Fried		x-5483	cfried@winona.edu	
lame (please print)		Phone	e-mail address	
			[Revised 9-6-11]	

## **Catalog Description:**

## **PSY 308 - Experimental Psychology** (3 S.H.)

Introduction to scientific methods and research techniques in psychology. Prerequisites: PSY210, PSY231, ENG 111 or 112, and concurrent enrollment in  $\bigcirc$  PSY 309 - Experimental Psychology Lab. Grade only. Offered each semester

### **Introductory Comments:**

Experimental Psychology (PSY 308) is being proposed as a Writing Intensive Course within the General Education Program. PSY 308 is a required course (for psych majors) where students learn the process of conducting psychological research. A large component of this course is teaching students how to communicate research findings using the standards of the field (e.g., APA format).

A brief explanatory notes: PSY 308 used to be listed as a Critical Thinking class under the old University Studies program. Since USP has been phased out and the critical thinking goal is functionally removed from GEP, the department has decided to rethink the placement of this course. The content of the course has not changed, however, and it has always been where students learn APA formatting and get the most exposure to writing and communication in the discipline.

## **Course Outline**

- 1. Introduction to Psychological Research
  - a. Introduction to scientific and critical thinking
  - b. Basics of scientific method
- 2. Statistical Analysis (COMPETENCY #4 & 5)
  - a. Descriptive Statistics
  - b. T-tests (independent means and paired t-tests)
  - c. Anovas
  - d. Repeated measures designs
  - e. Factorial Anovas
- 3. Measurement Issues
  - a. Reliability of measurements
  - b. Construct validity
  - c. Types of dependent measures, including self-report, physiological, and behavioral measures
- 4. Basics of True Experiments
  - a. Simple Single Factor Between Subject Experimental Designs
  - b. Random assignment to condition
  - c. Control techniques such as equivalent conditions
  - d. Extraneous variables and confounding variables
  - e. Internal validity
- 5. Conducting data base searches and literature reviews (COMPETENCY 2, 4, & 5)
  - a. Using scientific data bases to conduct searches
  - b. Identifying appropriate sources
  - c.

- 6. Writing research reports (COMPETENCY 1 5)
  - a. Elements of APA style and formatting
  - b. Appropriate content of academic research papers
  - c. Citing and referencing previous research
  - d. Academic style prose writing
  - e.
- 7. Within Subject Designs
  - a. Explanation of repeated measures designs
  - b. Benefits of repeated measures designs
  - $c. \quad Order\,effects\,and\,counterbalancing\,schemes$
- 8. Factorial Designs
  - a. Interpreting main Effects and Interactions
  - b. Between subject factorial designs
  - c. Repeated measure factorial designs
  - d. Mixed factor factorial designs
- 9. Ethics
  - a. Ethical guidelines for the treatment of human subjects
  - b. Ethics in science and scientific reporting (COMPETENCY 1 & 2)
- 10. Validity Issues
  - a. Internal validity and threats to internal validity
  - b. External or ecological validity
- 11. Quasi-Experimental and Non-Experimental Designs
  - a. Pre-test post-test designs or small-n designs
  - b. Interrupted time series designs
  - c. Correlational research
  - d. Survey research
  - e. Case studies
  - f. Observational research

Competency	Assignment(s) and Learning Opportunities	Assessment
1. Practice the processes and procedures for creating and completing successful writing in their fields	<ul> <li>Writing research papers</li> <li>Class instruction on APA formatting</li> <li>Practice writing results sections to clearly and accurately describe research findings based on description of study and data output</li> </ul>	<ul> <li>Formal grades and detailed feedback on papers</li> <li>Informal feedback on papers from peers</li> <li>Grades on homework</li> </ul>
2. Understand the main features and uses of writing in their fields	<ul> <li>Class instruction on APA formatting</li> <li>Assigned reading of selected published research papers</li> <li>Exposure to previous papers when writing literature reviews for later paper</li> <li>Writing research papers</li> </ul>	<ul> <li>Formal grades and detailed feedback on papers</li> <li>Grades on reading assignments</li> </ul>
3. Adapt their writing to the general expectations of readers in their fields	<ul> <li>Assigned papers will increase in complexity as semester goes along</li> <li>Students will be expected to respond to feedback on previous papers (both in terms of content and formatting/style) and show improvement over the course of the semester.</li> </ul>	<ul> <li>Formal grades and detailed feedback on papers</li> <li>Informal feedback on papers from peers</li> </ul>
4. Make use of the technologies commonly used for research and writing in their fields	<ul> <li>Instruction and practice in using Word and Excel for creating reports and papers in proper APA format</li> <li>Instruction and practice in using SPSS for data analysis.</li> <li>Instruction and practice in using library search engines (e.g., Psychlnfo) to locate previous research</li> </ul>	Formal grades and detailed feedback on papers
5. Learn the conventions of evidence, format, usage, and documentation in their fields	<ul> <li>Class instruction on APA formatting</li> <li>Instruction in and exposure to literature reviews, including citing sources and writing reference sections.</li> <li>Intensive instruction (and repeated practice) reporting results, including reporting statistical data and designing graphs and tables</li> </ul>	<ul> <li>Grades on reading assignments</li> <li>Formal grades and detailed feedback on papers (especially literature reviews)</li> <li>Grades on homework</li> <li>Grades on selected exam questions</li> </ul>

#### INFORMATION ON ASSIGNMENTS AND ASSESSMENT

#### Writing Intensive Components of the course:

<u>Writing Research Papers</u>: The main class component relevant to the writing intensive designation is writing research papers. In the class, students write 3 or 4 research papers. These are write-ups of experiments they have run during lab. The papers are spread throughout the semester and increase in complexity. For example, the initial paper may focus on method and results sections and have a very abbreviated introduction and discussion sections. Subsequent papers will have more complex methods and results sections and also more complete literature reviews. Students work in groups (in lab) to conduct the research, and are encouraged to work together in writing their papers (even though papers are handed in and graded individually). This allows for some peer feedback of writing. Each paper is then graded by the instructor, who provides detailed feedback both on the content and on the style/formatting. Papers are returned to students who can refer to them when writing future papers.

<u>Instruction in APA formatting</u>: This is the class in the department where students learn APA formatting. Several class periods are designated to instruction on the APA formatting rules, the writing style, and content conventions of research reports in psychology. This instruction covers everything from scientific writing style to proper citations and references.

<u>Reporting of Statistics and Results</u>: The ability to clearly articulate the findings of research is vital to the discipline of psychology. One key component of this course involves teaching students the conventions for reporting the results of research. It includes teaching students how to interpret statistical output from SPSS and how to accurately report and describe the output. This also includes instruction on how to communicate results in graphs and tables in proper APA format.

Exposure to Published Research: Throughout the semester, students are required to read published research articles and dissect and interpret them. These papers are often tied to the research papers students are writing. This provides students with examples of "professional" papers in psychology.

Although it varies slightly between instructors, the papers typically account for 20-25% of the points in the class, and other components (homework and reading assignments and relevant components on exams) account for an additional 10-15% of total points.

**Assessment and assessment plan:** The clearest demonstration of the writing intensive nature of the course is the research papers written by the students throughout the semester. Therefore, to document both the writing intensive designation and student achievement in this area, sample papers from each class will be collected each semester and maintained in a department repository. A sample of 10-15% of the students will be chosen. Their first and last papers of the semester will be maintained. Papers will be reviewed by PSY308 instructors using a rubric to be determined.