



present a research proposal as their final project. This research proposal, presented in poster format, can be based on an extension of one of the studies conducted in class or it can be based on an entirely new project. The lab instructor will be guiding you through all aspects of small assignments, writing the research project, and preparing your research proposal presentation.

**Specific Information Concerning Lab Meetings:**

1. All lab meetings will be held in 224 Johnson Tower.
2. Because the labs are a very important component of the course, students are expected to attend each meeting of their lab section. Students will lose 5 grade points for each lab missed and will lose 10 grade points for a lab missed in which an experiment was conducted. If 4 or more lab meetings are missed, the student cannot pass the course. In other words, please **attend all lab meetings!** If a lab meeting is missed due to illness, please contact the lab instructor before the lab meeting time; you may arrange with the lab instructor to go to another lab the same week to make up the lab missed. Also, students will lose 2 points each time they are late to lab. So please **do not be late for lab**. There will be no lab meetings the first week of classes. Do not report to lab until the second week of classes.
3. **There are 4 different labs offered.** Students must sign up for both lecture and one lab section (4 credits total). **The 4 lab times are as follows:**

Lab 1: Tu 1:10 to 3:00 pm	Lab 3: Wed 8:10-10:00 am
Lab 2: Tu 3:00 to 5:00 pm	Lab 4: Wed 3:10 to 5:00 pm

- If you have not signed up for a lab, please do so immediately. See online registration for open labs.
- You must be registered for both the lecture AND a lab

**Grading:** The final grade will be based on performance on three exams, one research paper (lab 2), one group research proposal and presentation, research project assignments, and several short lab activities/homework. **Extra credit** will be awarded for answering extra credit questions on exams (Exam 1 and Exam 2), participating in psychological research conducted by the WSU psychology department, or writing a short summary of a neuropsychology article. **Instructions for extra credit research sign-up are on the last page of this syllabus.**

**Exams:** The exams will consist of multiple choice questions, essay questions, and short answers. Exams must be taken at the date and time scheduled in this syllabus. **No makeup exams** will be given except under extreme circumstances (e.g., cases of an illness or death in the family). A letter will be required to validate a student's excuse for missing an exam. Also, students must notify the instructor *ahead of time* if he/she will **miss an exam**. No exam materials will be handed back. Instead, **grades will be posted on webCT at <https://elearning.wsu.edu>** or provided by your TA during lab and/or office hours. The lab instructors will go over the exam one week after the exam (if time allows). If a student wishes to review his/her exam in detail, he/she may visit the lab instructor or the professor during office hours or by appointment. **If a student believes he/she has earned credit on an exam question that was marked as incorrect**, he/she must discuss this with the lab instructor or Dr. Fournier before the next exam.

Exam 1	100 pts
Exam 2	100 pts
Exam 3	<u>100 pts</u>
	<b>300 pts</b>

**Research Project and Research Assignments:** All research projects and assignments must be typed, written in APA format (if applicable), and must be written independently unless stated otherwise. Identical or very similar research papers or assignments will receive a zero. Also, research papers that do not follow APA format will receive a zero. Students should make sure to include all sections and materials in each research report as assigned by the laboratory instructor.

**Due dates** for each assignment are listed in the course schedule and will be announced during lab. All assignments are to be turned in at the beginning of your lab during the lab week in which the assignment is due, unless stated otherwise. Laboratory assignments and papers handed in **late will be penalized** by 10% of the total points per each day that it is late. Assignments more than 5 days late will not be accepted. Paper drafts handed in late may not receive feedback (this is up to your lab instructor). Group research proposals will be presented during the student's scheduled lab, dead week. Proposals must be presented at this time-- no exceptions.

**Research Project Assignments:**

<b>Problem Solving Research Assignments</b>	hypothesis, method, results ( <b>Assign #2</b> ) =	30 pts
<b>Research Project (Personality/Alcohol Use):</b>	Paper Draft (introduction; <b>Assign #3</b> ) =	10 pts
	Paper Draft (method, result; <b>Assign #4</b> ) =	20 pts
	<b>Final Paper (Assign #5:</b> abstract, title page, intro, method, result, discussion, references, table/figure) =	100 pts
<b>Attention Research Assignment</b>	Questions concerning: background, hypothesis, method, prediction, result & discussion ( <b>Assign #7</b> ) =	30 pts
<b>Group Proposal Project</b>	References; general design ( <b>Assign #8</b> ) =	0 pts
	Poster Draft ( <b>Assign #9</b> ) =	20 pts
	Final Poster ( <b>Assign #11</b> ) =	<u>100 pts</u> <b>310 pts</b>

**Small Research Assignments (laboratory assignments):**

<b>Assign #1:</b> Hypothesis, identifying variables, confounds, etc., =	20 pts
<b>Assign #5:</b> Design, main effects/interactions =	20 pts
<b>Statistics</b> (each stat SPSS assign in lab = 5 pts; 3 assignments =	15 pts
<b>Assign # 10:</b> Designs (all covered) =	<u>10 pts</u> <b>65 pts</b>

<b>Final Grades:</b>	Exam points =	300 pts
	Research points =	310 pts
	Small Lab Assignment points =	<u>65 pts</u> <b>675 pts</b>

The following cutoffs can be used to estimate the grade in the course. Actual grade cutoffs will be determined at the end of the semester.

93.4% = A	76.7% = C+
90% = A-	73.4% = C
86.7% = B+	70% = C-
83.4% = B	66.7% = D+
80% = B-	60% = D
	< 60% = F

**Extra Credit:** Extra credit can be received on exam questions (Exam 1 and Exam 2 only) psychology department research participation, or by writing a short summary of a neuropsychology research article (see below). A maximum of **15 pts** of extra credit are possible. The total possible extra credit points will be scaled to equal 15 pts of your total grade.

1. Extra credit on exams: 5 points per one question on each of first 2 exams (total = 10 points)
2. Extra credit through psychology research participation: 5 points per research session (maximum of 3 sessions). This must be completed by the Friday that precedes dead week or earlier (no exceptions). See "Experiment Sign Ups" on Psychology Department webpage: <http://www.wsu.edu/psychology/>. Experiment Sign Ups is located in the center menu, under "Undergraduate Resources".
3. Extra credit by writing a 1-2 page summary of a neuropsychology research article (that directly records brain activity, either using fMRI or single cell recording techniques). This extra credit assignment must be completed and turned into your TA by the Friday that precedes dead week or earlier (no exceptions). Can earn 5 points per summary, with a limit of 2 summary papers that must be from 2 different articles and topics (10 points max).

**Common Courtesies:** Please show up to lab and lecture on time. Arriving late distracts the instructor and students in the class. If you arrive late or must leave lecture early, please sit where you can enter and leave quietly without disturbing others. Finally, please do not talk during class unless the lecture/lab activity requires talking.

**If having difficulty in course:** *Do not wait* until the end of the semester to let your lab instructor and/or professor know of your dilemma. Come see us as soon as you discover you are having problems in the course, we may be able to give you some helpful hints to get you on track.

## **Cheating Policy**

### **Exams**

If a student is caught cheating on an exam, the student will receive a 0 on that exam. If the student is caught cheating a second time on an exam, the student will receive a 0 in the course. Please do not take this risk! If you are having difficulty with the reading or lecture material, please set up an appointment to discuss it with the lab instructor or professor.

### **Research Reports / Homework Assignments**

If a student is caught copying another student's assignment either partially or in whole, the student will receive a 0 on the assignment and the WSU Academic Affairs office will be notified. If a student is caught copying another student's assignment either partially or in whole a second time, the student will receive a 0 in the course. If a student engages in plagiarism, the student will receive a 0 on the assignment and the offense will be reported to the university administration (see penalty of plagiarism in WSU catalogue). If you are having difficulty with an assignment, please set up an appointment to discuss it with the instructor or the TA. We will do our best to help you work through any writing difficulties you may be having.

**Accommodation for Disabled:** Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the Disability Resource Center (DRC). All accommodations MUST be approved through the DRC (Admin Annex Bldg, Room 205). Please stop by or call 509-335-3417 to make an appointment with a disability specialist.

## **Course Schedule For Lecture & Lab (pages 5-9)**

**PSYCH 312 COURSE SCHEDULE (pages 5-9)\* \*\***

<b>Week</b>	<b>Date</b>	<b>Lecture Topic</b>	<b>Lecture Reading</b>	<b>Weekly Lab Topic</b>	<b>Weekly Lab Readings</b>
1	8/21/07	Introduction Proposal Project What is science?	Ray, Ch. 1	NO LAB MEETING	None
	8/23/07	Intro to Methods; Validity and propositional logic	Ray, Ch. 1 & 2 Zelezny Ch. 2 concepts		
2	8/28/07	Developing the hypothesis (operational definitions); IV, DV, (briefly: confounds, extraneous variables)	Ray, Ch. 3 Zelezny Ch. 3 concepts	Orientation; Research Proposal Outline; Article search online (alcohol, sensation seeking, or proposal); References (APA style);  Assignment 1: Identify hypothesis, IV and DV, confounds, extraneous variables  Exp. 1 "Problem Solving" preparation: Assign experimenters and participants	Ray Ch. 15 (writing scientific papers)  APA manual: format for references
	8/30/07	Research Procedures: Conceptual steps in Experimentation; Consent Forms; Debriefing	Ray (back cover of book)		
3	9/4/07	Measurement, Scaling, Descriptive Statistics	Ray, Ch. 4 Zelezny Ch. 4 mult. choice	<b>Assignment 1 due</b> (20 pts)  <b>Conduct Exp. 1</b> "Problem Solving" Debrief  Discuss Hypothesis, IV, DV, alternative interpretations and manipulations. Outline relevant literature and development of hypothesis.	APA manual: Writing introduction, hypothesis-predictions). See also online sources.  Ch. 15 Ray (pp. 349-364; 370)
	9/6/07	Descriptive Statistics Inferential Statistics	Ray, Ch. 4 Ray, Ch. 5		
4	9/11/07	Inferential Statistics Hypothesis Testing Validity and Variation Type I and Type II errors	Ray, Ch. 5 Ray, Ch. 6 Zelezny Ch. 5 Mult. choice	Outline methods Data Analysis Exp. 1 (Rationale; SPSS; interpretation- 5pts). Writing results Outline result section  Assignment 2: Problem Solving Hypothesis, Methods & Results	Download and read: Exp. 1 Lab Notes Exp. 1 Articles Exp. 1 Apparatus Exp. 1 Statistics Exp. 1 Grade Sheet  Read APA Writing Methods and Results; Ray, Ch. 15
	9/13/07	Hypothesis Testing Internal Validity (confounds)/External Validity	Ray, Ch. 6 Zelezny Ch. 6 concepts		

Week	Date	Lecture Topic	Lecture Reading	Weekly Lab Topic	Weekly Lab Readings
5	9/18/07  9/20/07	Questionnaires, Survey Research, Sampling  Questionnaires, Survey Research, Sampling	Ray, Ch. 13 Zelezny Ch. 13 concept & mult. choice  Ray, Ch. 13 Zelezny Ch. 13 concept & mult. choice	Outline Discussion, abstract, references for Exp. 1  <b>Conduct Research #2</b> "Alcohol & Sensation Seeking" and Debrief  <b>Assignment 2 Due:</b> Hypothesis, Methods & Results (6, 12, 12 pts = 30 pts total)  Exam Review Exam Review Exercises	Read APA Writing Discussion Ray, Ch. 15- Writing Discussion  Bring Zelezny Book to lab Exam Review Exercises
6	9/25/07  9/27/07	Exam Review Download Review Sheet  <b>Exam 1</b> (Ray, Ch. 1-6; Zelezny, Ch.1-6)	Ray, Ch. 1-6, Zelezny Ch 1-6,	Research #2 Background, Hypothesis, Sampling.  Go over some Exam Review Exercises  Assignment 3: Research #2 Draft of Introduction with hypothesis-predictions	Download and read: Res. #2 Lab Notes Res. #2 Articles Res. #2 Grade Sheet
7	10/02/07  10/04/07	Control Through Design, etc.  Between Subject Designs	Ray, Ch. 7 Zelezny Ch. 7, concepts, mult. choice  Ray, Ch. 8 (pp. 172-178)	Research #2 Outline Methods; Data Analysis SPSS- 5pts; Outline Results; Interpretation of results; Discussion; Abstract  <b>Assignment 3 Due:</b> Research #2 draft of Introduction w/ hypothesis/predictions (10 pts)  Assignment 4: Research #2 draft of Method, Results, Discussion (optional: draft of abstract and references)	Download and read: Res. #2 Lab Notes Res. #2 Articles Res. #2 Statistics

Week	Date	Lecture Topic	Lecture Reading	Weekly Lab Topic	Weekly Lab Readings
8	10/09/07  10/11/07	Between Subject Designs; Factorial Designs  Factorial Designs And Interaction Effects	Ray, Ch. 8, pp. 172-187  Ray, Ch. 8, pp. 178-197	Research #2 Outline Discussion Writing Abstract Writing References  <b>Assignment 4 Due:</b> Research #2 draft of Method, Results, Discussion (20 pts)  <b>Conduct Exp. 3</b> "Change Blindness"	Read APA --relevant info for Discussion, Abstract & Reference writing
9	10/16/07  10/18/07	Interaction Effects/ interpretation  Within-subject Designs Counterbalancing Analysis of Variance: Change Blindness Example	Ray, Ch. 8, pp. 188-197  Ray, Ch. 9, pp.201-208  ANOVA stats download	Exp. 3: Discuss Background, hypothesis, IV, DV, predictions.  Exp. 3: Data analysis; graph & interpretation of results (stats—5pts due in class)  Assignment 5: Final Research #2 paper (abstract, intro, method, results, discussion, references)  Assignment 6: Designs/main effects & interactions  Assignment 7: Exp. 3 Questions (background, method, results, graph, interpretations)	Download and read: Exp. 3 Lab Notes Exp. 3 Articles Exp. 3 Statistics Exp. 3 Grade Sheet
10	10/23/07  10/25/07	Mixed Designs; Matched Designs  Ecology of Experiments (Biases: Experimenter/ Participant/ External Validity)	Ray, Ch. 9, pp. 208-215  Ray, Ch. 10; Zelezny Ch. 10 concepts, mult. choice	Research Proposal Guidelines  Assignment 8: Proposal online article search- at least 3 articles; Proposal hypothesis and general design  <b>Assignment 5 Due: Final Research #2 Paper (100 pts)</b>  <b>Assignment 6 Due:</b> Designs/main effects & interactions (20 pts)	Download: Research Proposal Guidelines (bring to lab)

Week	Date	Lecture Topic	Lecture Reading	Weekly Lab Topic	Weekly Lab Reading
11	10/30/07  11/01/07	Quasi-Experimental Designs  Exam 2 Review Focus: Ch. 8, 9 concepts and mult. choice.	Ray, Ch. 11 pp. 242-261.  Ray, Ch. 7-10; 13; Zelezny, Ch. 7-10 & 13 concepts, mult. choice, & pp. 103-104!!	<b>Assignment 8 Due:</b> Proposal online article search- at least 3 articles; Proposal hypothesis and general design (discuss in lab, no points)  Research Proposal Guidelines (poster)  Exam 2 Review (if time)  Assignment 9: Research Proposal Draft	Zelezny Ch. 7-10 concepts & mult. choice; exam review  Research Proposal Guidelines (bring to lab)
12	11/06/07  11/08/07	<b>Exam 2</b> Ray, Ch. 7-10, 13; Zelezny, Ch. 7-10; 13)  Correlational Designs/ Naturalistic Studies	  Ray, Ch. 11 pp. 262-269	<b>Assignment 7 Due:</b> Exp. 3 questions (30pts)  Assignment 10: Designs (all covered)  Work on research proposal drafts, questions for TA  Discuss poster grading	Research Proposal Guidelines and Grading Criteria (bring to lab)
13	11/13/07  11/15/07	Single Subject Designs (Milner example) Ethics questions  NO LECTURE (Professor at conference)	Ray, Ch. 12 Ray, Ch. 14	<b>Assignment 9 Due:</b> Research Proposal Draft (20 pts)  Assignment 10: All designs through Ch. 12 readings	TBA
	11/19/ TO 11/23	THANKSGIVING BREAK	HAVE FUN!		
14	11/27/07  11/29/07	Ethics Research-Publication Process: APA Guidelines; University Internal Review Board; External Review of Research Manuscript  Lecture = TBA	Ray, Ch. 14 Zelezny Ch. 14 concepts, mult. choice	<b>Assignment 10 Due:</b> Designs (10 pts)  Discuss Research Proposals (feedback) and Discuss Poster Presentation  Work on 2 <sup>nd</sup> draft of proposals: Discuss in lab (no points); TA's comments	TBA

Week	Date	Lecture Topic	Lecture Reading	Weekly Lab Topic	Weekly Lab Readings
15	12/04/07  12/06/07	NO LECTURE  Exam 3 Review Course Evaluations	Ray, Ch. 11, 12, 14; APA style Zelezny Ch. 11, 12, 14	Assignment 11 Due: RESEARCH PROPOSAL POSTER PRESENTATIONS (100 pts)	NONE
16	12/16/07  Thursday 10:10 am to 12:10	EXAM 3: FINALS WEEK  (Ray, Ch. 11, 12, 14; APA style; Zelezny Ch. 11, 12 & 14)  Exam 3 in Lecture Classroom	NONE	NONE	NONE

**Hope You Enjoyed the Course!**