



OTRP online

Office of Teaching Resources in Psychology

EXPERIMENTAL PSYCHOLOGY PSYC270 SPRING 2005 SEMESTER

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Office Hours: M through Th: 10:00 – 11:00 a.m.
F: 8:30 – 9:00 a.m.; 12 – 12:30 p.m. (Upper County)

Required Texts: Pelham, B.W., & Blanton, H. (2003). *Conducting research in psychology: Measuring the weight of smoke*. Belmont, CA: Wadsworth/Thompson Learning.

American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.

I. About Your Instructor

A. Professional Data:

I received my Bachelor of Arts in Psychology from The Catholic University of America in 1972. My graduate studies were completed at Lehigh University, where I received a Master of Science (1974) and a Doctor of Arts in Psychology in 1976.

The focus of my graduate training was the teaching of Psychology. Although I consider myself a generalist, I have particular interests in research methods, social psychology, cognition, and philosophy. I have been a member of the psychology faculty at Bucks County Community College since 1976, and I constantly marvel that there are people in this world that would actually pay me for doing something that is so much fun: teaching. In addition to PSYC270, I also teach “Introduction to Psychology” and two Integration of Knowledge courses: “Intelligence” and “Creativity.”

I have worn a number of “hats” while at the College. I served as Chairperson of the Department of Behavioral and Professional Sciences from 1982 to 1989. In the 1989-1990 academic year I served as Interim Director of Development (a fund raising position) and Grants Coordinator for the College. In 1990 I returned to full-time teaching. From 2000 to 2002, I led the College’s institutional Self-Study for reaccreditation by the Middle States Association of Colleges and Schools. In 2002 I was honored to receive the Lindback Distinguished Teaching Award. I have worked with just about every office in the College and know just about everyone. If you ever find yourself wondering where to go or who to talk to at the College to get something done, don't hesitate to ask me for assistance.

B. Personal Data:

I am one of the few people you are likely to meet who claims Washington, D.C. as a hometown (as opposed to temporary residence.) I live in Doylestown with my wife, Barbara, who is the Coordinator of Transfer here at the College. I have three daughters (Beth, Jennifer, and Eileen) who are currently living “away from home” and pursuing their own interests (theological studies, biochemical research and medical school, respectively.) I enjoy warm weather pursuits, such as swimming and walking on the beach. I love to read, and I enjoy listening to my growing collection of jazz recordings.

At heart I am a perpetual student, and I think that teaching is the best way to learn. I find human behavior to be an endlessly fascinating subject for

learning; I am looking forward to sharing that fascination with you this semester.

C. Philosophy of Teaching and Learning:

I think of myself as a "**Provocateur**" of Psychology (as opposed to "professor".) The most common meaning of provocateur is "one who incites others to riot or revolution". However, I am not interested in starting riots in the classroom. The Latin root of the word, provocare, which means "to call forth", is closer to what I see as my role in the classroom. My job is to call forth the knowledge within you and encourage you to add to that knowledge by asking **provocative** questions. You will be asked many questions in this course, some factual and some reflective. All of the questions have one purpose, to prompt you to make the knowledge of Psychology **personal** by giving your **voice** to it.

A lot of the things that I do in this course will make much more sense to you if you understand the assumptions that I operate from. In no particular order they are:

1. The teacher is not responsible for the student's learning, the student is.
2. The teacher is responsible for **facilitating** the student's learning by:
 - providing the appropriate resources.
 - managing the learning experience.
 - providing the student with frequent feedback.
 - encouraging the student to reflect on and assess his or her own learning.
3. **THERE IS NO FREE LUNCH.** Learning requires a sufficient investment of time and effort.
4. Learning proceeds most efficiently when the students know what they should know and how they are doing. Learning is difficult enough without having to play "guess what the teacher wants me to know".

II. Course Objectives

This course is designed to continue the process of training you to think and write like a psychologist. Specifically, this course will help you to:

- ❖ Develop an understanding of the experimental strategy in scientific investigation that includes an appreciation for the benefits and costs involved in selecting that strategy.
- ❖ Read and understand research reports that are published in the psychological journals.
- ❖ Apply the experimental method to answer questions about behavior through participation in laboratory exercises and experiments.
- ❖ Develop research skills for an efficient review of the psychological literature.
- ❖ Understand the American Psychological Association's ethical principles of experimental research with human participants.
- ❖ Prepare written reports of experimental investigations according to the stylistic conventions of the American Psychological Association.

Core Curriculum Learning Objectives:

- ❖ **Critical Thinking/Problem Solving:** The students will be able to:
 1. understand and express the meaning and significance of a variety of communications. (Interpretation.)
 2. use methods, concepts and theories in new situations. (Application Skills.)
 3. integrate and/or combine knowledge from multiple sources to create new knowledge. (Synthesis.)
 4. reason from what they know to form new knowledge, draw conclusions, solve problems, explain, decide, and/or predict. (Inductive and/or Deductive Reasoning Skills.)
 5. communicate and justify clearly the results of their reasoning. (Presenting Argument Skills.)
- ❖ **Information Literacy:** The students will be able to:
 1. determine the nature and extent of the information needed.
 2. determine the technologies and information formats appropriate for the information identified.
 3. access needed information effectively and efficiently.
 4. evaluate information and its sources critically and incorporate selected information into their knowledge base and value system.
 5. develop an understanding of the many of the economic, legal, and social issues surrounding the use of information and access and use information legally and ethically.

III. Schedule of Events: Classroom¹

Date:	Topic/Event	Reading
January 24	-Playing the science game. -Science as a way of knowing.	Chapter 1, 2 Reserve articles
January 31	-Experimental research basics. -Analysis of a research report	Chapter 9 (pp. 274-278) Reserve articles
February 7	-Research ethics. -Journal Article Summary #1 due.	Chapter 3
February 14	-Measurement: the central problem of research.	Chapter 4
February 21	Threats to Validity #1	
February 28	Threats to Validity #2 -- Confounds -Journal Article Summary #2 due	Chapter 10
March 7	-Making sense of statistics in research. -The logic of hypothesis testing. -Effect size and power	
Friday, March 11: Midterm Grades Submitted		
March 21	-Finding information: Information Literacy basics. -Journal Article Summary #3 due	Chapter 5 (pp. 133 – 138) Chapter 6
March 28	-Introduction to research design. -Correlational vs. experimental designs. -Inadequate designs.	Chapter 7 Reserve article
April 4	-“Let’s Make a Deal”: The Monty Hall Dilemma -Design teams prepare proposals	Chapter 8
April 11	-Monty Hall design proposals presented. -Independent groups designs	Chapter 8

¹ Reading assignments are for the following week’s class session.

Date:	Topic/Event	Reading
April 18	-Correlated Groups designs -Intro to factorial designs	Chapter 8 Reserve articles
April 25	-Factorial designs (cont.)	
May 2	-Factorial designs (cont.) -Lab Report #4 Due	
May 10	-Debrief and course evaluation	

IV. Schedule of Event: Laboratory

January 19	-Introduction to the course -Jumping right in; an experiment.	
January 26	-Displaying and describing data.	
February 2	-Experiment #1: Mental Rotation -Data analysis discussion	Chapter 11 (pp. 310 – 322) Chapter 12
February 9	-Writing the Method and Results sections -How to describe numerical results. -Displaying data in tables	Reserve article
February 16	-Experiment #2: Levels of Processing -Data analysis discussion -Lab report #1 due.	
February 23	Unit 1 Assessment	Reserve articles
March 2	-Writing the Discussion section. -Review/discuss levels of processing literature -Review and discuss levels of processing data	
March 9	-Lab report #2 due -Experiment #3: Encoding Specificity	Reserve articles
March 23	-Writing the Introduction section -Review of encoding specificity literature -Discussion of encoding specificity data	Reserve Articles

Date:	Topic/Event	Reading
March 30	-Lab Report #3 due – Friday, April 1 -Experiment #4 Introduced: Monty Hall Dilemma	
April 6	Unit #2 Assessment	Reserve articles
April 13	Monty Hall Experiment data collection	
April 20	-Monty Hall data Analysis	
April 27	-Research Colloquium: Monty Hall Experiments Presented	
May 4	-Unit 3 Assessment	

V. Assignments

- A. Unit Assessments. There will be **three** assessments of your understanding of the course material during the semester. These assessments will ask you to demonstrate your **understanding** of the concepts of experimental research and your ability to **apply** these concepts. Memorization is not required; consequently, you will be allowed to use your text, your notes and any other resources you find helpful. These are **individual assessments; collaboration with classmates is not permitted.**
- B. Journal Article summaries. One way to gain an understanding of the experimental method in psychology is to read the published accounts of experiments in the various psychological journals. You will be expected to read and summarize **three** experiments over the course of the semester. Guidelines for preparing these summaries will be provided.
- C. Lab Reports. In the laboratory portion of this course you will be:
1. Learning to use the library (print and electronic resources) to locate information related to specific questions about behavior.
 2. Participating as subjects in psychological experiments that will be conducted in class. You will also be required to recruit participants for one or more laboratory experiments.
 3. Working with other students to research, plan, and carry out an experiment of your own design.

You will be responsible for preparing written reports documenting your research activity in the labs. These reports must conform to the stylistic conventions of the American Psychological Association (which are described in the *Publication Manual of the American Psychological Association, 5th Ed.*) Your research reports will be evaluated according to the clarity and precision of your writing and your adherence to APA style. By the end of the course you will have begun to write like a psychologist.

You will be provided with specific instructions for preparing each lab report.

VI. Grading

Assignment	Weight	Credit Points
1. Unit Assessments (3)	43 %	100 each
2. Journal Article Summaries (3)	11%	25 each
3. Lab Reports	46%	
Experiment #1: Mental Rotation		45
Experiment #2: Levels of Processing		65
Experiment #3: Encoding Specificity		80
Experiment #4: Monty Hall		100
Experiment #4: Monty Hall proposal		35

The maximum number of credit points that a person may earn during the semester is 700. Your final grade will be determined by the total number of credit points you accumulate over the course of the semester. The course is intentionally designed so that most of the credit points are earned at the end. A **shaping strategy** is employed: skills are practiced and incrementally added over the course of the semester. The credit points you earn gradually increase in proportion with your developing skills. Letter grades will be assigned according to the following schedule:

A = 630 and above

C = 490 - 538

B⁺ = 609 - 629

D⁺ = 469 - 489

B = 560 - 608

D = 420 - 468

C⁺ = 539 - 559

F = 419 and below

VII. Miscellaneous

A. Make-up policy: No make-up sessions for unit assessments will be scheduled. The dates for each assessment are given in the schedule of events. If you are unable to take an assessment on the day scheduled, you may make arrangements with the instructor to sit for it early. Make-up assessments **may** be allowed under extraordinary circumstances if:

- ❖ the instructor is notified on or before the day of the assessment.

- ❖ proper documentation is submitted (e.g., doctor's note, auto mechanic's bill, etc.)
 - ❖ the assessment is made up before the next meeting of the class.
- B. On work submitted late: All work is due on the date given in the "Schedule of Events." No late work will be accepted. Requests for extensions **may be granted** if the instructor is consulted **before** the assignment is due.
- C. On typing: All work must be word-processed. Follow the manuscript preparation instructions found in Chapter 5 of the *APA Publication Manual*.
- D. Extra Credit: There is enough to do in this course; you do not need any extra work. If you are concerned about your progress in the course, please do not hesitate to speak with me.
- E. On withdrawal: If you decide not to complete the course, it is your responsibility to notify the College of your intention to withdraw before the deadline (which is included in the schedule of events.) You may withdraw by filling out the appropriate forms in person at the Office of Admissions or by mailing in a written notice. **Do not assume that the instructor will initiate the withdrawal for you.**

I will, however, at my discretion, withdraw from the course at midterm those students who have given no evidence that they intend to fulfill the obligations set forth in this syllabus through: (1) excessive absences or (2) failure to submit completed assignments.

- F. On retention of class work: All graded work will be returned to the student. Please retain all work that is returned to you. Mistakes happen. In the event that you have a question about your grade for the course, I will ask you to produce your graded work. **Also, your transfer institution may wish to see samples of the work you produced in this course. Your writing documents your progress through the semester; they show what you can do. Keep them safe.**
- G. On writing: I believe that the abilities to think clearly and to write clearly are highly correlated. Even though this is not a composition course, you will be expected to demonstrate a command of the mechanics of good writing. Care should be taken in all written work to employ correct spelling and punctuation as well as good organization and proper grammatical constructions. A portion of the grade that you receive on the written work that you produce will be based upon my overall evaluation of the quality of your writing.

This is a **WRITING INTENSIVE** course. Completion of CMP110 with a C or better is strongly recommended. The Tutoring Center, located on the lower level of the Library, is available to consult with you on any written assignment. Please bring a copy of the assignment's instructions with you when you go.

- H. On Intellectual Honesty: “The expectation at Bucks County Community College is that the principles of truth and honesty will be rigorously followed in all academic endeavors. This assumes that all work will be done by the person who purports to do the work without unauthorized aids. In addition, when making use of language and some idea not his or her own, whether quoting them directly or paraphrasing them in his or her own words, the student must attribute the source of the material in some standard form, such as naming the source in text or offering a footnote.” (BCCC Catalog.) Please consult the college Catalog for a full explanation of the policy on cheating and plagiarism. **IN OTHER WORDS: Plagiarism is a very serious offense against the scientific community – don’t do it!**
- I. On Submitting Work to WebCT: Student access to a Bucks County Community College WebCT course space is available only during the official stated semester/session as indicated by the College's academic calendar. It is the student's responsibility to retain copies of his/her own work and/or correspondence posted to WebCT for any future reference. All WebCT course sites, including content, are routinely removed from the WebCT server at the conclusion of each semester/session.

VIII. A Final Word

The only way to gain proficiency in the skills of research is by doing: reading about, performing, and writing about research. There is much to do in a single semester. **Consequently, this course will require a substantial investment of your time and effort. You should, at a minimum, plan to spend at least 10 to 12 hours a week working on this course.** Assignment due dates are given in the schedule of events. Please consult it frequently and plan your time from the beginning of the semester. **DON'T GET BEHIND!**

This course, if it is successful in achieving its objectives, will provide the foundation for all of the advanced laboratory and content courses in psychology that you will take. Only you can tell me if this course eventually proves to be a valuable and useful experience for you. I would very much appreciate hearing from you about this. For now, I am looking forward to working with you this semester.