Prerequisites: Psych 112, Stat 215, Psych 221 (“C” or better), all students are expected to have and maintain an active CCSU NT or “BlueNet” computer account.

Description: Controlled experiments are contrasted with non-experimental designs, such as naturalistic observation, surveys, and field studies. Factorial, mixed and multivariate designs are discussed. Each student will complete the independent project proposed in PSY 221. Instruction in statistics and the use of SPSS will be continued.

Required Texts:


Instructor:

Steven W. Horowitz, Ph.D.; Office: Barnard 100500; Office Voice Phone and Voice Mail: 832-3119; Internet address: HOROWITZS@CCSU.EDU Office Hours: Monday and Wednesday 12:00 – 1:00 p.m.; Tuesday and Thursday 9:00 a.m. – 10:00 a.m.; Monday 4:30 p.m. – 5:30 p.m.

Exams and Assignments:

There will be three exams during the semester and a final exam during exam week. Each exam will be worth 50 points. The final paper, reporting on your completed research project, is worth 75 points. Each student will give a 15 minute oral presentation in class that will be video taped. Each student will provide the blank video tape for this taping, and then critique his or her own performance. The presentation and critique are, together, worth 25 points. There will be an additional 75 points available in homework, laboratory, and computer assignments. The total number of points available is, thus, 375. Grades will be assigned on the basis of the number of points you have earned during the semester as a percentage of the highest total in the class. The percentages are translated into letter grades below. The final paper reporting on your research project must be in APA style. Please turn in 2 (two) copies of the paper along with a key article from your reference section.
Class participation and attendance:

The success of this class depends on your participation in class. In order to participate, of course, you must attend class. I strongly urge you to make a habit of coming to class every day. I will not take attendance because I consider class attendance to be your responsibility. However, note that the date due for each assignment will be clarified when they are made, and no assignments will be accepted late. This particularly applies to computer assignments, which will be reviewed in class on the day they are due.

Accommodations:

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. I will need a copy of the accommodation letter from Student Disability Services in order to arrange your class accommodations. Contact Student Disability Services, room 241 Copernicus Hall, if you are not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations with your faculty.

Incompletes:

Incompletes can only be given to students who have successfully completed 75% of the course material. This usually applies to a student who missed the final exam or has been excused by the Dean for medical reasons. I cannot give an incomplete to a student who is failing the course. Because of the above University regulations, very few incompletes are awarded. In addition, **incompletes must be discussed with me before grades are awarded.**

Withdrawals:

If you are not doing well in the course, you may decide to withdraw. Before the middle of the term (March 25) you may withdraw by contacting the registrar. After the middle of the term you must follow an involved procedure, which requires approvals from several individuals. Be sure to check with me before filling out the withdrawal form, since the approval depends on the reasons stated on the form. You should
continue to attend class until the withdrawal has been approved by the Dean. If the withdrawal is not approved, I will have to grade you for the course. The first exam is scheduled before the deadline for withdrawal so you can have some feel for what is expected.

Computer:

All students are expected to complete assignments on the computer. You must have a University NT or “BlueNet” account. Information on how to obtain such an account is available from the instructor or the staff in the micro-computing laboratory (Marcus White Annex). Take time, early in the semester, to log on and make sure that that account is active and serviceable.

First Assignment:

You first assignment is not worth any points! It is required for you to begin your research project. You must revise your research proposal to take into account any comments that your Psych 221 instructor made on it at the end of the semester. It should be in perfect APA style and ready to be reviewed by the Human Studies Council. You must also fill out the Human Studies Council forms attached to this syllabus. These forms, and the revised proposal are due the second week of class. We will discuss how to fill out these forms in class during the first week.

Schedule

<table>
<thead>
<tr>
<th>Week of</th>
<th>Reading/Lecture (Chapters are in (Shaughnessy and Zechmeister unless indicated otherwise)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 22</td>
<td>Chapters 1-6, 12 Review, proposal revision</td>
</tr>
<tr>
<td>28</td>
<td>Review and proposal revision</td>
</tr>
<tr>
<td>February 4</td>
<td><strong>First Examination</strong> 2/4 for section 03 and 2/5 for section 01</td>
</tr>
<tr>
<td>(Chapters 7 and 13)</td>
<td>2/6 and 2/7 Independent Groups Design and Analysis</td>
</tr>
<tr>
<td>February 11</td>
<td>Independent Groups (continued)</td>
</tr>
<tr>
<td>February 19</td>
<td><strong>No Class Monday</strong> Chapter 8, 13 Within-Subjects Design and Analysis</td>
</tr>
</tbody>
</table>
Within-subjects design continued

March 3  Review of chapters 7, 8, 13

March 10  Examination 2 on March 10 for section 03 and March 11 for section 01

March 12 and 13: Chapters 9, 13: Complex Designs and Analysis

March 17  SPRING BREAK

March 24  Chapters 9 and 13 continued

March 31  Chapter 11 Quasi-Experimental Designs and Program Evaluation

April 7  Review chapters 9, 13, 11, and lecture

April 14  Examination Three  Research Presentations (Bring video tape) begin April 16

April 21  Research Presentations

Bring video tape

April 28  Research Presentations Research Projects Due

Bring video tape

May  5  Review for Final

RESEARCH PROJECTS DUE WEEK OF April 28 (Friday at 5:00 p.m.)

Final Examination:
Section 01 (Tuesday/Thursday at 10:00) Tuesday, May 13, 8:00 a.m.
Section 03 (Monday/Wednesday at 9:00) Monday, May 12, 8:00 a.m.

Cumulative, chapters 7, 8, 9, 11, 13 and lecture
HSC# ____________________(leave blank)
CENTRAL CONNECTICUT STATE UNIVERSITY
HUMAN STUDIES COUNCIL (HSC)

PLEASE TYPE

PRINCIPAL INVESTIGATOR: ___________________________ PHONE: ________

INVESTIGATOR'S MAILING ADDRESS_________________________________________

TITLE OF PRINCIPAL INVESTIGATOR: ___________________________ EMAIL_________

ACADEMIC DEPARTMENT OF PRINCIPAL INVESTIGATOR__________________________

TITLE OF PROJECT:_______________________________________________________

If this research is for thesis/graduate work or ANY other
STUDENT PROJECT, your supervising professor must sign below
indicating approval for submission of proposal to HSC. (If you
are submitting this electronically, your supervising professor
should submit a separate e-mail or letter indicating approval of
your project.) See below for a note on what professor’s
approval entails).

For students, please indicate (check) which of the following best describes your
project:

____ Dissertation
____ Thesis
____ Special Project (graduate level capstone other than thesis or
dissertation)
____ Class project: specify CCSU DEPT/CLASS:____________
____ Other undergraduate research project

Who is your supervising professor? _________________________

What is your professor’s academic department?
____________

PROFESSOR’S SIGNATURE INDICATING
APPROVAL* __________________________
(*note: professor’s approval means that the supervising
professor has reviewed all material to be submitted by the
student researcher and has determined that the submission is
complete, is consistent with relevant ethical principles and
procedures, is free of typographical and other errors, and that
the quality of the material is deemed to be suitable for human
studies review and distribution to potential participants, as
appropriate.)
SPONSORING AGENCY (if applicable)_______________________________________

PROJECT START DATE:______________________ CONTINUATION___________________

NEW PROPOSAL_____ OLD PROPOSAL WITH CHANGES_____ OLD PROPOSAL W/OUT CHANGES_____

IF OLD PROPOSAL, PREVIOUS HSC #_______

PLEASE COMPLETE ALL PARTS OF THIS FORM

1. SUMMARIZE YOUR PROPOSED RESEARCH; OUTLINE OBJECTIVES AND METHODS (Do not exceed 150 words) See #2 on Checklist.

2. SUMMARIZE ALL INVOLVEMENT OF HUMANS IN THIS PROJECT: (WHO, HOW MANY, AGE, SEX, LENGTH OF INVOLVEMENT, FREQUENCY, ETC.)

3. INDICATE WHETHER ANY SUBJECT OF YOUR RESEARCH WILL BE SELECTED FROM THE FOLLOWING CATEGORIES:

( ) Minors ( ) Pregnant women ( ) Mentally retarded
( ) Mentally disabled ( ) Physically disabled ( ) Prisoners
( ) Addicts ( ) Parolees ( ) Fetuses ( ) none of the above
4. CHECK ALL RISKS TO HUMANS INVOLVED IN YOUR PROJECT: (See #3C Checklist)

____ No risks
____ Deception
____ Personal material (interviews, opinions, test scores)
____ Stress or emotional arousal
____ Loss of privacy
____ Embarrassment, disappointment, or other disagreeable emotion
____ Alteration of self-concept (e.g., through knowledge of test scores)
____ Physical or psychological trauma or pain
____ Loss of legal rights
____ Experimental diagnostic procedures
____ Side effects of medications
____ Experimental treatment procedures
____ Contraction of disease
____ Worsening of illness

BRIEFLY EXPLAIN ANY OF THE ABOVE YOU CHECKED

5. INDICATE PROCEDURES TO PROTECT HUMAN PARTICIPANTS FROM RISKS

(Check all appropriate):

____ Precautions in uses of stressors or emotional material (explain below)
____ When deception used, subjects full informed as to the nature of the research at a feasible time (explain below)
____ Procedures to minimize changes in self concept (explain below)
____ Data from protected sources
____ Code numbers will be used
____ Individual data submerged in results
____ No unauthorized use of data
____ Data confidentiality will be used
____ Debriefing on experimental purposes
____ Clinical trial (describe data monitoring below)
____ Sterile equipment
____ M.D. or other appropriately trained individual in attendance
6. **INDICATE HOW YOU WILL OBTAIN INFORMED CONSENT** (see sample CONSENT FORM)

___ Subject or parent/guardian reads information on consent form and signs (Please attach a copy of the consent form used)

___ Subject receives ORAL briefing (from principal investigator or project personnel) and then gives ORAL consent. (Please attach copy of the text of briefing and consent)

___ Other (please explain)

7. **BRIEFLY DESCRIBE THE SOCIAL AND SCIENTIFIC BENEFITS THAT WILL ACCRUE TO EACH HUMAN SUBJECT AND TO HUMAN BEINGS IN GENERAL, AS A RESULT OF THE INDIVIDUAL'S PARTICIPATION IN THE PROJECT:**
DRUG FREE CERTIFICATION

As a condition of approval of this research, I certify that I will not engage in the unlawful manufacturing, distribution, dispensing, possession or use of a controlled substance in conducting any activity associated with this research. (45 CFR 620, subpart F, Appendix C)

SCIENTIFIC MISCONDUCT STATEMENT

I certify that I am aware that Central Connecticut State University does not tolerate scientific misconduct. The following PHS definition (NPRM) is accepted by the University: "Misconduct' or 'misconduct in science' as used herein is defined as plagiarism, deception or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting or reporting research; or (2) material failure to comply with federal requirements that uniquely relate to the conduct of research."

________________________________________
Signature of Investigator

Date_____________________

*If you are submitting this form electronically check here______ and read section B below. Please note that you should also print one hard copy of this form and send it with your signature via mail to: Office of Sponsored Programs, Barnard Hall, Room 102. We must have a signed copy on file before we can approve the project.

A. If submitting paper copies: SUBMIT TWELVE (12) COPIES OF THIS FORM WITH THE FOLLOWING ATTACHED TO EACH COPY:

1. Copies of each consent form (written and/or verbal text)
2. Copies of all questionnaires, surveys, tests and other relevant material used

SEND OR DELIVER ALL COMPLETED FORMS TO:

Office of Sponsored Programs and Research Services, Barnard Hall, Room 102.
HSC APPROVAL CHECKLIST

THE FOLLOWING CHECKLIST IS INCLUDED TO HELP GUIDE YOU IN THE COMPLETION OF THE HSC HUMAN RESEARCH APPROVAL FORM. PLEASE REFER TO IT AS NECESSARY.

1. Administrative
   a. Are the appropriate number of copies submitted?
   b. Are copies of each informed consent form submitted (see further information below about consent forms)?
   c. Are copies of each questionnaire and/or example stimuli submitted?
   d. Have you attached a “gatekeeper” letter, if necessary. For example, if you are conducting a study in a school, have you attached written permission from the principal or superintendent?

2. Scientific Aspects
   a. Is the hypothesis stated?
   b. Is the research design appropriate?
   c. Does the information to be collected provide a means to answer the hypothesis?
   d. Is a sample size calculation performed? If not, is it necessary?

3. Human Subjects Issues
   a. Is the study population defined?
   b. Are there any anticipated problems from using this study population? Is it appropriate for the hypothesis to be tested? Are subject recruitment procedures documented? Will the study be advertised? Is subject compensation addressed?
   c. Are the risks adequately defined?
   d. Are the potential benefits clearly defined to the subjects and to society?
   e. Do the benefits outweigh the risks?
   f. How are the subjects protected from risks?

4. Consent Form
   a. Is the study title on each page with the investigator’s name and contact phone numbers and e-mail addresses? Be sure to include all CCSU contact information (phone & e-mail) for Human Studies contacts: Ms. Kaplan and Dr. Waite (see sample consent form for model)
   b. Is there a clear description of the study goals, design and implementation?
   c. Is there a clear description of potential risks?
   d. Is there a clear description of what is expected of the subject such as extra visits, extra tests, and the duration of the subject’s participation?
   e. Are all of the standard University statements included, such as confidentiality, withdrawal, subject rights, and compensation provided, if any? (see sample consent form for model)
   f. Is the consent form readable and in clear, easy to understand lay terms? Are there spelling, typographical, or grammatical errors?
   g. If your study involves children (e.g., minors under the age of 18 years) have you provided a copy of the consent letter/form that you will use with parents or guardians and the assent form that you will use with the minors.
A.P.A Norms for Preparation of Research Reports
Horowitz Psychology 222

Adapted from Adolfo Chavarro, Ph.D.’s
Experimental Psychology Handbook

The following checklist will be used to evaluate your report:

1. **TYPING STYLE**

1. All pages have the same size (8.5" X 11"). Use white paper.
2. There is a double space between all lines throughout.
3. All margins have 1.0" (at the top, bottom, right, and left).
4. Five spaces indentation on every paragraph (except first line of abstract).
5. Short title and page number on every page from cover page on.
6. Pages of text without interruption from Intro to Discussion.
7. Section headings follow APA norms (see pages 113-115 in APA manual).
8. Tables/Figures are numbered with Arabic numbers.
9. Words are not divided (no right justification).
10. Everything typed. Use the same type-face (font) and type-size throughout.

2. **WRITING STYLE**

11. There is a logical development of theory/ideas/concepts, etc.
12. Use of impersonal/scientific style (third person pronoun).
13. Every word means exactly what it is intended to mean (no slang).
14. Sentences have appropriate length (no run-on sentences, avoid compound sentences).
15. Paragraphs have appropriate length (no one-sentence paragraphs).
17. Correct spelling.
18. Correct punctuation.

3. **CONTENT**

A. **Cover Page**

19. Title is self-explanatory and states the main topic (variables).
20. Author’s name and affiliation is completely stated.
21. Running head is shortened version of title.
22. Follows APA norms (capital/lowercase letters, etc.)

B. **Abstract** (summary)
C. Introduction (What did you do and why did you do it?)

29. Starts on page 3 with the complete title of the paper.
30. Begins with a general introduction to the problem/topic.
31. Gives definitions of terms/concepts that should be defined.
32. Cites previous research that is related to it (at least five).
33. Summarizes hypotheses, method, conclusions, etc. of that research.
34. Relates the present research to that earlier research/work.
35. States the purpose/objectives of the present experiment/study.
36. States the research hypothesis of the present experiment/study.
37. Uses past tense to report previous research/work.
38. Presents operational definitions of variables, including clear definitions of independent and dependent variables.

D. Method (What EXACTLY did you do?)

39. Participants are clearly identified (number, gender, age, origin, motivation to participate, etc.)
40. Describes in detail every apparatus/stimulus/instrument used. Addresses issues of reliability and validity.
41. Gives information on sources of tests, questionnaires, etc.
42. Explains clearly the experimental design.
43. Explains how subjects were assigned to conditions/treatments.
44. Describes each step of the procedure: the WHAT and the HOW.
45. Includes verbal instructions given to (human) participants.
46. Describes in detail how the dependent variable was measured.
47. Specifies how extraneous variables were controlled.
48. Uses the past tense throughout the section.

E. Results (What did you find out?)

49. Opens with a brief statement on the main results.
50. Reports the data in sufficient detail and logical order.
51. Presents results without any interpretation.
52. Reports the descriptive statistics.
53. Reports the inferential statistics according to type of data.
54. Presents the obtained values (t, F, etc.), df, alpha, p, etc.
55. Describes the statistical decision made based on the analysis.
56. Refers to tables with sufficient explanation.
57. Refers to figures with sufficient explanation.
58. Uses past tense except where present tense is appropriate.

F. Discussion (What do you conclude? How do you interpret?)

59. Opens starting with the support or nonsupport of the hypothesis.
60. Clearly summarizes and emphasizes the major results.
61. Presents a clear interpretation/qualification of results.
62. Examines similarities and differences with research cited in the Introduction.
63. Theoretical and/or practical implications of the results.
64. Proposes alternative, possible explanations of the results.
65. Mentions shortcomings of the present study.
66. Makes suggestions for future research on the topic.
67. Presents clear and definite conclusions of the study.

G. References (Where did your rationale come from)

68. Starts on a new page with a centered heading.
69. Must present sources of someone else's ideas or work.
70. Must have at least three references.
71. Lists ALL and ONLY the references cited in the text.
72. All referenced sources are clearly traceable.
73. Follow APA norms (order, format, indents, underlines, etc.).
H. Tables, Figures and Appendices

74. At least one table with relevant information.
75. At least one figure with relevant information.
76. The Tables and Figures are useful for understanding the results or the study.
77. Tables and Figures are appropriately labeled and understandable.
78. A copy of any questionnaire, survey, etc. provided in the appendix.