LONG SIGNATURE SHEET

UNC CHARLOTTE

Proposal Number: PSYC 06-10-11

Proposal Title Revised/New Graduate Courses

Originating Department Psychology and Health Psychology Ph.D. Programs

TYPE OF PROPOSAL: UNDERGRADUATE_____ GRADUATE X UNDERGRADUATE & GRADUATE____
(Separate proposals sent to UCCC and Grad. Council)

DATE RECEIVED	DATE CONSIDERED	DATE FORWARDED	ACTION	SIGNATURES
6/10/11	6/10/11	6/10/11	*Approved*	**DEPARTMENT CHAIR**
			Approved	**COLLEGE CURRICULUM COMMITTEE CHAIR**
			Approved	**COLLEGE FACULTY CHAIR**
			Approved	**COLLEGE DEAN**
			Approved	**UNDERGRADUATE COURSE & CURRICULUM COMMITTEE CHAIR** (for undergraduate courses)
			Approved	**GRADUATE COUNCIL CHAIR** (for graduate courses)
			Approved	**FACULTY GOVERNANCE SECRETARY** (noting Faculty Council approval on Consent Calendar)
				FACULTY EXECUTIVE COMMITTEE (if decision is appealed)

Revised 12/10/09
OAA/jdp

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE

REVISED/NEW GRADUATE COURSES

PROPOSAL FROM: THE DEPARTMENT OF PSYCHOLOGY AND THE HEALTH PSYCHOLOGY PH.D. PROGRAM

TITLE: THE ELIMINATION OF PSYC 6203 and PSYC 6204; THE REVISION AND NAME CHANGE OF PSYC 8102 AND PSYC 8103; AND THE CREATION OF A NEW GRADUATE COURSE IN ADVANCED QUANTITATIVE ANALYES FOR BEHAVIORAL SCIENCES (PSYC 8104).

A. Proposal Summary and Catalog Copy

1. Summary

The Department of Psychology and Health Psychology (HPSY) Ph. D. Program propose to:

Eliminate the following courses

PSYC 6203 Research Design and Quantitative Methods I
PSYC 6204 Research Design and Quantitative Methods II

Modify course titles for

PSYC 8102 Research Design and Quantitative Analyses 1 *to*
PSYC 8102 Research Methodologies in Behavioral Sciences

PSYC 8103 Research Design and Quantitative Analyses 2 *to*
PSYC 8103 Basic Quantitative Analyses for Behavioral Sciences

- *Add 1 new variable-content course designations*:
  PSYC 8104 Advanced Quantitative Analyses for Behavioral Sciences

- *Reorganize framework for completing degree as described in revised Catalog Copy* (See Attachment G2)

2. Proposed Catalog Copy (See Attachment G2).

B. Justification

1. *Identify the need addressed by the proposal and explain how the proposed action meets the need.*

Overview

Health Psychology (HPSY) is a rapidly emerging field of basic and applied research that utilizes principles of psychology to impact health and illness across the lifespan. More specifically health psychology seeks to understand the role that behavior and its physiologic concomitants play in the etiology, treatment, and prevention of physical and mental illnesses, and the promotion of health and wellness. The Health Psychology Ph. D. program at UNC Charlotte has as its objectives the training of students who will:

- Develop strong research skills that will enable them to be leading contributors to the science of health and wellness.
- Obtain specific applied skills that will enable them to use knowledge from psychology to better understand disease, dysfunction, and the promotion of healthy lifestyles.
- Obtain educational training and supervised experience with faculty in psychology and related health professions that will enable them to develop an interdisciplinary perspective on health that they can apply to research and/or practice.
- Gain experience in working with health practitioners from different fields, enabling them to become active participants in and leaders of multidisciplinary teams that seek to understand and improve health and wellness across disciplines.
- The goal of the program is to educate students to be competitive applicants for academic and research positions, however, students will be equipped to pursue a wide arrange of career opportunities.

Context

When the original research methods sequence was developed, it was explicitly noted that it was a starting point for our curriculum and was assumed that the curriculum would grow and develop along with the program. The current sequence has been offered for four years. We felt it was an appropriate time to evaluate the curriculum and consider revisions to further enhance the quality of doctoral training offered by the HPSY program.

Our evaluation of the current sequence included discussions with the faculty who have taught the courses, discussions with HPSY track coordinators to understand the needs of the program and the functioning of the specific courses, surveys of faculty who have supervised doctoral students to assess their perception of the preparation of students, surveys of the current HPSY students to understand their experiences and concerns, and evaluation of course syllabi and previous student evaluations. The results of this evaluation process identified three specific pedagogical and programmatic goals relevant to the methods and analysis sequence and several key concerns and challenges with the current sequence.

Pedagogical Goals:

1. Ensure that *in the first year*, all HPSY doctoral students have a focused, rigorous training that leads to a basic functional proficiency in research design and analysis.

2. Ensure that students enrolled in Psychology masters programs have a research design and analysis course tailored to their needs and consistent with the expectation of research knowledge/proficiency expected of their terminal degree.
3. Better utilize the resources we have to meet HPSY students' research methodology and statistical training needs (assuming no new resources).

Key Challenges and Concerns to Address:
The existing curriculum presents a number of pedagogical and practical challenges. First, the development of the curriculum of the doctoral level programs associated with HPSY was originally done by attempting to map onto the existing master's level courses. However, this has inadvertently given rise to some redundancies across courses and unintended omissions in the curriculum. Further, the current curriculum was not set up in a formal sequence, resulting in some inconsistency in the level of methodological expertise attained by advanced students in the program. In addition, we have encountered a situation in which some courses are consistently under-enrolled whereas others are over-crowded. The proposed revision will help alleviate these problems by creating a set of courses clearly targeted for different purposes.

Second, the HPSY faculty is stretched thin to cover all the graduate courses required for APA accreditation of the clinical track of the program, the offerings of the HPSY program more broadly, and their obligations to the Psychology Department. At the same time the program has not been completely taking advantage of the expertise of its current faculty. Part of the desire for the curriculum change is to allow a more efficient and effective use of our faculty resources.

Third, current division of ANOVA and Multiple Regression & Correlation (MRC) into different courses exacerbates the fallacy that these analytic procedures are incompatible and conveys to students the idea that choice of method should be based on one's subfield rather than matching analytic strategy to the nature of the data and conceptual question to be answered. Courses under the current designations have gained a reputation as the "experimental" and "non-experimental" courses, respectively. Rather, we believe it is important for the modern researcher, in particular the interdisciplinary researcher, to be familiar with a range of methodological and analytical approaches so that they can tailor both to provide optimal information relevant to their research questions.

Fourth, given the interdisciplinary nature of the HPSY program and the anticipation that students will be expected to operate in an increasingly interdisciplinary world, we desire a curriculum that fosters a broad understanding the major methodological approaches used across the behavioral sciences. The revised curriculum is designed to allow for a dedicated methods course that exposes students the full range of various quantitative methodological options at their disposal, and thereby enhancing their ability to effectively conceptualize and evaluate interdisciplinary research.

Finally, through our evaluation of both the existing curriculum and feedback from faculty and students, there is a desire to better balance the pedagogical goals of individual courses with the overall pedagogical goals of the HPSY program. The results of the

evaluation indicated some concern that individual courses with multiple cross-registrations, while of high quality in their own right, were targeted to meet the goals of one specific program at the expense of others. This revision would yield a cohesive sequence of courses to best meet the HPSY students' needs, while ensuring that all stakeholders that draw upon Psychology resources can meet their pedagogical goals effectively and efficiently.

Solutions

The challenges outlined above have very little to do with the quality and character of the HPSY faculty, and much more to do with the specific needs of doctoral level education, how the various affiliated programs draw upon Psychology courses, and demands placed on certain courses. In revising the curriculum, we want to retain everything that is innovative and successful about our program, building on the strengths of its past, while adjusting those features of the curriculum that do not serve our students and faculty well. Thus, the central components of our proposed curricular revision is (a) separation of doctoral and masters level courses and (b) reformulation of the methods and analysis curriculum.

(For a more detailed description of the specific courses, see Attachment G1).

Conversations about curricular revision revealed shared interests in better preparing HPSY doctoral students for completion of degree milestones and ultimately for independent research careers. It also revealed a shared interest in better utilizing existing resources.

The revised curriculum resolves a number of the problems outlined above. First, and perhaps more importantly, it allows the HPSY program to more effectively educate our doctoral students and connect the program more clearly to its interdisciplinary mission. We believe the revised courses will better show students how methods, theory and analytics relate to each other and embody a fairly unified and coherent approach to studying health behavior. They signal to students that the effective and modern researcher carefully considers a variety of methods and analyses, often using them in combination, to study complex phenomena. We believe the revised courses move away from the fallacious thinking that a particular method can only be useful for a particular area or a particular question, or that a method or analytic strategy should be selected without consideration of the research question. Finally, while developing skills important to the academic study of health, these courses also foster analytical skills useful to a range of professional and disciplinary endeavors.

Second, by eliminating redundancies in the 8000 level Psychology courses and decreasing demands upon the instructors in particular courses, the new curriculum will in fact allow students to cover more material, and have more options, without increasing the number of courses required. This also allows the program to take advantage of the expertise among the faculty without placing additional course requirements on our faculty. The revision also allows us to shift some faculty into courses in which their expertise is better utilized.

Third, by having a required Health Psychology course covering a diversity of methods, and one that is directly linked with a course focused on developing analytic strategies (rather than simple application of a given method), we believe all HPSY students will better and more quickly develop a sense of understanding and appreciation for a variety of methodological and analytic approaches. *Currently there is no Psychology course that covers a broad spectrum of methodologies.* By eliminating the curricular distinction among analytic procedures, the base course in quantitative analyses will ideally instill in students an appreciation for linking research questions with the best available analytic procedure rather than forcing their questions to fit the sometimes quite stifling requirements of a specific method.

Fourth, the revised curriculum will promote progress toward completion of the degree milestones and ideally motivate students to engage in research earlier in their graduate careers by giving them a basic understanding of methods and analyses during their first year in the program. We also believe this will enhance the ability of students to engage the material in their content seminars at a deeper level.

Fifth, the proposed revision addresses the curriculum's tendency to treat all students as if they had the same preparation and goals. By separating doctoral courses from the masters courses, we believe each program will be able to better service the needs and goals of its students, allowing faculty to more effectively design courses to satisfy the needs of a more homogenous grouping of students. Additionally, this will relieve the overcrowding in some courses and even out the enrollment across other courses.

Finally, the proposed revision allows the HPSY program to prepare for the future. As part of this revision, a new revolving topics course will be added to the curriculum. This will allow us to offer a variety of options to students in different methodologies, be flexible to changing composition of faculty over the years, and easily integrate new methodologies as they emerge.

Summary

In order to reflect more accurately the interests and abilities of the current HPSY faculty as well as address more effectively the pedagogical and practical needs of HPSY students, the HPSY program proposes a revision of the framework for completing the methods and analysis sequence of the doctoral degree.

2. *Discuss prerequisites/corequisites for course(s) including class-standing.*
   PSYC 8102 (or the equivalent) will be a prerequisite for PSYC 8103.
   PSYC 8102 & 8103 (or the equivalent) would be a prerequisite for 8104.

3. *Demonstrate that course numbering is consistent with the level of academic advancement of students for whom it is intended.*

The proposed changes actually make the courses more consistent with the Psychology Department's current division of courses into 6000 vs. 8000 level courses. The

Department assigns course numbers in relation to the amount and difficulty of the material, with 6000 level primary targeted for master's level education and 8000 level targeted for doctoral level education. In the past, these courses had been mixed into a single course ignoring the distinctions; the propose change re-instates the distinction.

4. *In general, how will this proposal improve the scope, quality and/or efficiency of programs and/or instruction?*
In addition to solving the problems outlined above, this proposal furthers the College's move toward interdisciplinary and doctoral level training. Without sacrificing the Department of Psychology's or the HPSY program's unique contributions to the mission of the College, the proposed changes enhance the ability of the program to offer an appropriate and rigorous training in research methodology. Further, as noted above, the changes remove redundancies across courses and increases efficiency by ensuring that content in each course is appropriately tailored to the level and purpose of the course.

C. Impact

1. *What group(s) of students will be served by this proposal?*
Doctoral students enrolled in the HPSY program and the OSCI programs will be most directly impacted by this proposal, but all students taking graduate level methods courses offered by the Department of Psychology will gain a better sense of the internal coherence of courses in the Department as well as the relation between our courses and courses taken elsewhere in the University.

2. *What effect will this proposal have on existing courses and curricula?*
a. *When and how often will added course(s) be taught?*
The new PSYC 8104 course will be placed on an "on demand" rotation, meaning it will be offered based on student and faculty interest. It is anticipated to be taught once a year, but may vary depending on availability of other quantitative methods offered by affiliated departments.

b. *How will the content and/or frequency of offering of other courses be affected?*
It is not expected that these changes will have any direct impact on the content or frequency of other Psychology courses with the exception of PSYC 6203, PSYC 6204 and PSYC 6205 which will not be offered regularly. However, with the increased efficiency, it is expected that some faculty may have freed time to offer other graduate level courses. The overall impact is expected to help HPSY doctoral students complete their degree in a timely fashion.

c. *What is the anticipated enrollment in course(s) added (for credit and auditors)?*
PSYC 8102 and 8103 are expected to have a minimum of 12 students each semester (all first year HPSY students and first year OSCI students), but may consistently have as many 15 students.

Based on previous requests from students, and the fact that PSYC 8104 will allow faculty members to develop a course related to student interest and needs, and that the content

will rotate, it is expected that this course will consistently enroll at least 6, but as many as 15 doctoral students.

d. *How will enrollment in other courses be affected? How did you determine this?* Because the changes do not require changes in the total number of courses offered by faculty nor required of HPSY students, enrollments in other courses should not be affected. PSYC 6102 is expected to maintain a consistent enrollment of 8-12 students as all first year Psychology masters students (from the IO and CC programs) will continue to register for this course.

e. *If course(s) has been offered previously under special topics numbers, give details of experience including number of times taught and enrollment figures.*

Given constraints imposed by the current curriculum, additional special topics seminars were not feasible. However, a survey of HPSY students indicated significant interest in such a course had it fit into their schedules. The proposed revision addressed this issue by allowing additional flexibility in the choice of the third methods course used to satisfy the HPSY requirements.

f. *Identify other areas of catalog copy that would be affected, e.g., curriculum outlines, requirements for the degree, etc.*

1. Course descriptions/catalog copy for PSYC 8102 and 8103
2. Include new listing for PSYC 8104
3. Delete listing of PSYC 6203 & 6204
4. Add cross-listings for OSCI: PSYC 8102 will be cross-listed as OSCI 8102; PSYC 8103 will be cross-listed as OSCI 8103; PSYC 8104 will be cross-listed as OSCI 8104

D. Resources Required to Support Proposal

When added resources are not required, indicate "none." For items which require "none," explain how this determination was made.

1. *Personnel*
   a. No new faculty, additional part-time instructors, additional teaching assistants and/or increased load on present faculty will be required since all new courses can be taught by at least one current faculty member.

   b. Qualified faculty members interested in teaching revised/new course(s):

      PSYC 8102 (Charlie L. Reeve; Virginia Gil-Rivas; Paula Goolkasian; Eric Heggestad; Anita Blanchard, and other faculty who express interest).
      PSYC 8103 (Arnie Cann; Charlie L. Reeve; Linda Shanock, and other faculty who express interest).
      PSYC 8104 (George Demakis; Charlie L. Reeve; Virginia Gil-Rivas; Linda Shanock; Eric Heggestad and other psychology faculty who express interest).

If different faculty are teaching PSYC 8102 and 8103, they will need to coordinate so as the courses fit well-together.

2. *Physical Facility*
No additional resources, since all new courses will be taught in regular classrooms.

3. *Equipment and Supplies*
No additional resources, since all new courses require equipment and supplies similar to those required by our current courses.

4. *Computer*
No additional resources, since none of the new courses requires additional computer work by students.

5. *Audio-Visual*
No additional resources, since none of the new courses requires additional audio-visual work by students.

6. *Other Resources*
No additional resources, since all new courses require resources similar to those required by current curriculum.

7. *Indicate source(s) of funding for new/additional resources required to support this proposal.*
No additional funding for resources is required.

E. Consultation with the Library and Other Departments or Units

1. *Library Consultation*
(See Attachment G3)

2. *Consultation with Other Departments or Units*

- Organizational Science Program has confirmed via e-mail that they are aware of the proposed revision to the HPSY/Psychology curriculum (See Attachment G).
- The Department of Psychology/HPSY Program is not aware of any other Department, Program or College affected by the proposed revisions to its curriculum.

F. Initiation and Consideration of the Proposal

1. *Originating Unit*

As noted above, the HPSY program believes that a healthy program is one that continually evaluates is curriculum and considers potential revision through both formal and informal conversation. The discussions began when the HPSY program initiated its most recent strategic planning and APA related self-study. They continued in a slightly more informal way at two meetings which included faculty who currently teach the methodology courses, as well as formal surveying of HPSY students. Subsequently, a number of models for organizing the methodology curriculum were informally evaluated by the chair of the ad hoc curriculum revision committee. In September 2010, the HPSY Advisory Committee met to gauge program interest in curricular change and evaluate several brief proposals for potential revisions. Based on this feedback, the ad hoc committee prepared a formal report to the HPSY program's faculty that articulated the reasons that curricular revision might be advisable and outlined a proposed model for those revisions. Following revision based on that feedback, the proposal was circulated to the Psychology Department Graduate Curriculum Committee.

2. *Other Considering Units*

Organizational Science. A letter of support is attached. No other actionable consideration is required on behalf of other units.

G. Attachments

1. Catalog copy and course syllabi
2. Library consultation
3. Consultation with other units

ATTACHMENT G1

Catalogue Copy and Course Syllabi

Attachment G1
Catalog Copy and Course Syllabi

1. Course Number and Title
PSYC 8102 Research Methodologies in Behavioral Sciences
Cross-listed as OSCI 8102

2. Course Description (Catalog Description)
PSYC 8102. Research Methodologies in Behavioral Sciences (3). Admission to the Health Psychology (HPSY) or the Organizational Science (OS) doctoral programs, or by permission of the instructor. This interdisciplinary course provides a broad overview of the major research methodologies and methodological considerations in the behavioral sciences. Using examples drawn from the literature, the course focuses on general principles and perspectives of social science research. Topics include foundational concepts across the behavioral sciences (e.g., sampling, measurement, ethics, logic of hypothesis testing, etc.), and the evaluation of specific methodologies (e.g., experimentation, observation, survey, archival, epidemiological/ecological designs, etc.). Practical research considerations are also covered (e.g., basics of APA writing, IRB process and forms, data management and data cleaning, development of experimental protocols, etc). (Fall)

3. Pre- or Co-requisites
Admission to the HPSY program or the OS program, or by permission of the instructor. There are no course prerequisites or co-requisites for this course.

4. Objectives of the course
- Be conversant in the basic principles and concepts dealing with sampling and measurement.
- Gain general understanding (including advantages and limitations) of the major research strategies in the behavior sciences.
- Be able to integrate various methods to effectively investigate research questions.
- Be able to evaluate the appropriateness of conclusions and identify limitations of published research given the methodologies used.
- Develop basic research skills such as data management, scientific writing and handling local IRB procedures.

5. Instructional Method
Course will involve a combination of lecture, discussion, student presentations and activities/assignments (e.g. research proposals, IRB protocols, etc).

6. Means of student evaluation
Student Participation: 10%
Two Written Exams: 25% each (50% total)
Written Assignments/Papers: 40% total

7. Specify policies that apply to this course:

a. University integrity

Students have the responsibility to know and observe the requirements of "The UNC Charlotte Code of Academic Integrity." The most recent edition of the Code is included in the UNC Charlotte Graduate Catalog at http://graduateschool.uncc.edu/academics/catalog.html under the "University Regulation and Student Conduct" section.

Diversity Statement: UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability / disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation and socio-economic status

Disability Services: Students with documented disabilities are eligible to receive assistance from the Office of Disability Services. For detailed information, contact the Office of Disability Services, located in Fretwell 230.

b. Attendance

Required.

c. *Grading policy*

Final grades are based on the proportion of total points earned: A ≥ 90%; B ≥ 80%; C ≥ 70%; U < 70%.

d. *Additional requirements*

None.

8. Probable textbooks or resources

Singleton, R. & Straits, B.C. (2009). *Approaches to Social Research* (5th Edition). New York: Oxford University Press.

Cooper, H. (1998). *Synthesizing Research: A guide for literature reviews*. Thousand Oaks, CA: Sage.

Weekly supplemental readings from variety of scientific journals to be selected by instructor (one example week is shown; See "Archival Research")

9. Topical outline of course content

Part 1: Conceptual Foundations
1. Perspectives on the "science" of social science • S&S Chapters 1 & 2, "Introduction." & "The Nature of Science." • Rosenthal R., & Rosnow R.L. (2008). "The Spirit of Behavioral Research". In *Essentials of Behavioral Research* (3rd ed.). Boston, MA: McGraw Hill. • Coser, L. (1975). Two methods in search of a substance. *American Sociological Review 40*, 691-700.
2. Theory & Elements of Research Design and Hypothesis Testing • S&S Chapter 4. Elements of Research Design. • R&R Chapter 2, "Contexts of Discovery and Justification." • Marini, M., & Singer, B. (1988). Causality in the Social Sciences. *Sociological Methodology 18*, 347-409. • Feldman, D.C. (2004). What are we talking about when we talk about theory? *Journal of Management, 30*, 565-567. • Gray-Donald, K., & Kramer, M. (1988). Causality inference in observational vs. experimental

studies. *American Journal of Epidemiology* 127, 885-892.

- Coulson, M., Healey, M., Fidler, F., & Cumming, G. (2010). Confidence intervals permit, but do not guarantee better inference than statistical significance testing. *Frontiers in Psychology, 1*, 1-9.
- Rodgers, J.L. (2010). The epistemology of mathematical and statistical modeling: A quiet methodological revolution. *American Psychologist, 65*, 1-12.

3. *Basic Measurement: Principles and Concepts*
   - S&S Chapter 5, "Measurement."
   - Aftanas, M.S. (1988). Theories, models, and standard systems of measurement. *Applied Psychological Measurement, 12*, 325-338.
   - Cronbach, L.J., & Meehl, P.E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*, 281-302.
   - Traub, R.E. (1997). Classical Test Theory in Historical Perspective. *Educational Measurement: Issues and Practice, 16*, 8-14.
   - Hudson, W., & Faul, A. (1998). Measurement issues in human behaviour theory. *Journal of Human Behavior in the Social Environment, 1*, 23-32.

4. *Sampling*
   - S&S Chapter 6, "Sampling."
   - Hudson, W., & Faul, A. (1998). Measurement issues in human behaviour theory. *Journal of Human Behavior in the Social Environment, 1*, 23-32.
   - Bergman, L. R. (1996). Measurement and data quality in longitudinal research. *European Child & Adolescent Psychiatry, 5*, 28-32.

Part II: Methodological Approaches

5. *Experimental & Quasi- Experimental Design*
   - S&S: Chapters 7 and 8, "Experimentation" and "Experimental Design."
   - R&R Chapter 8, "Nonrandomized Research and Functional Relationships"

6. *Questionnaire & Survey Research*
   - S&S Chapters 9 and 10, "Survey Research" and "Survey Instrumentation."
   - Schaeffer, N., & Presser, S (2003). The science of asking questions. *Annual Review of Sociology* 29, 65-88.
   - Binson, D., & Catania, J. (1998). Respondents' understanding of the words used in sexual behavior questions. *Public Opinion Quarterly 62*,190-208.

7. *Archival Research*
   - S&S Chapter 12, "Research Using Available Data."
   - Franzosi, R. (1987). The press as a source of socio-historical data: Issues in the methodology of data collection from newspapers. *Historical Methods 20*, 5-16.

   Example Topic: Factors Responsible for Mortality Decline

   - Bunker, J.P., Frazier, H.S., & Mosteler, F. (1994). Improving health: Measuring effects of

medical care. *Milbank Quarterly 72*, 225-254.

- Cutler, D., & Miller, G. (2005). The role of public health improvements in health advances: The Twentieth-Century United States." *Demography 42*, 1-22.
- Lleras-Muney, A. (2005). The relationship between education and adult mortality in the United States." *Review of Economic Studies 72*, 189-221.

8. Field Research

- S&S Chapter 11, Field Research

9. Epidemiological Research

- Rothman, K.J. (2002). Epidemiology: An Introduction. New York: Oxford University Press.
- Anthony, J.C.(2010). Epidemiology and etiology hand in hand. In L. Scheier's (Ed.) *Handbook of drug use etiology: Theory, methods, and empirical findings* (pp. 113-124). Washington, DC, US: American Psychological Association.
- Costello, J. (2009). Editorial: How epidemiology helps. *Journal of Child Psychology and Psychiatry, 50*, 361-362.
- Deary, I. J., & Batty, G. D. (2007). Cognitive epidemiology: a glossary. *Journal of Epidemiology and Community Health, 61*, 378-384.

Part 1II: Practical Foundations

10. Ethics & Navigating IRB at UNCC

- S&S Chapter 3 "Research Ethics"

11. Writing & Publishing as part of the Scientific Process

- S&S Chapter 17. Writing Research Reports
- Klinger, J.K., Scanlon, D., & Pressley, M. (2005). How to publish in scholarly journals. *Educational Researcher, xx*, 14-20.
- Feldman, D.C. (2004). Negotiating the Revision Process. *Journal of Management, 30*, 305-307.
- Feldman, D.C. (2005). The devil is in the details: Converting good research into publishable articles. *Journal of Management,*

- Optional Texts:
  - Friedman, S. & Steinberg, S. (1989). *Writing and thinking in the social sciences.* Englewood Cliffs, NJ: Prentice Hall.
  - Cooper, H. (1998). *Synthesizing Research: A guide for literature reviews.* Thousand Oaks, CA: Sage.

12. Basic Data Management: Coding, Entry, Cleaning, Handling & Documenting

- S&S Chapter 15. Data Processing and Elementary Data Analysis

1. Course Number and Title
   PSYC 8103 Basic Quantitative Analyses for Behavioral Sciences
   Cross-listed as OSCI 8103
2. Course Description (Catalog Description)
   PSYC 8103. Basic Quantitative Analyses for Behavioral Sciences. (3). Admission to the HPSY or OS doctoral programs, or permission of the instructor. Prerequisite: PSYC 8102. Introduction to quantitative data analysis and interpretation. This course focuses on the strategic application of the multiple regression and correlational framework (including specific instantiations such as ANOVA, path analyses, etc) including the incorporation of manipulated or categorical independent and categorical dependent variables.
3. Pre- or Co-requisites
   PSYC 8102 or OSCI 8102 or the equivalent
4. Objectives of the course
   This course is a graduate level introduction to the general data-analytic system of regression and correlation. Multiple Regression and Correlation (MRC) refers to a family of quantitative techniques (including ANOVA) for explaining associations between one or more predictor variables and one or more criterion variables, or predicting outcomes given knowledge of a set of predictor variables. MRC (as a family of techniques) is an extremely versatile way to analyze data, as there are various MRC models that allow for most types of variables to be analyzed (e.g., continuous or categorical, naturally occurring vs. manipulated, repeated) or virtually any kind of expected relationship (e.g., linear, non-linear, interactive effects). Though there are a wide variety of specific MRC methods, the aim of this class is to ensure an understanding of the fundamentals of MRC as a data analytic system and how specific models (such as ANOVA) fit within the system. Key objectives include mastery of univariate descriptives, measures of bivariate association, and assessment of multivariate relations.

5. Instructional Method
   Course will involve a combination of lecture, discussion, and activities/assignments.
6. Means of student evaluation
   Final grades are based on the proportion of total points earned: A $\geq$ 90%; B $\geq$ 80%; C $\geq$ 70%; U < 70%.
   Exams: There will be three exams. Each exam will be two parts; one part in-class (essay) and one part take-home (data analyses and write-up).
   Assignments: There will typically be 5-6 assignments. Assignments typically consist of a data set and some information about the hypothetical study. Most will require students to use SPSS syntax for conducting data analyses. The purpose of the assignments is to have students apply the techniques discussed in class, and interpret the results of the analysis. Often the assignments will require students to determine what analytic strategy is most appropriate, and write a results section in an APA consistent manner.
7. Specify policies that apply to this course:
   a. University integrity
   Students have the responsibility to know and observe the requirements of "The UNC Charlotte Code of Academic Integrity." The most recent edition of the Code is included

in the UNC Charlotte Graduate catalog at http://graduateschool.uncc.edu/academics/catalog.html under the "University Regulation and Student Conduct" section.
Diversity Statement: UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability / disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation and socio-economic status
Disability Services: Students with documented disabilities are eligible to receive assistance from the Office of Disability Services. For detailed information, contact the Office of Disability Services, located in Fretwell 230.
b. Attendance
Required.
c. *Grading policy*
Final grades are based on the proportion of total points earned: A > 90%; B > 80%; C > 70%; U < 70%.
d. *Additional requirements*
None.

8. Probable textbooks or resources
Cohen, Cohen, West, & Aiken (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd edition). Mahwah, NJ: Erlbaum.
Selected Chapters from Rosenthal R., & Rosnow R.L. (2008). *Essentials of Behavioral Research* (3rd ed.). Boston, MA: McGraw Hill.

Supplemental readings from scientific journals to be selected by instructor

9. Topical outline of course content

Topic
Part I: Foundations
Describing Data
Variance & Measures of Bivariate Association
Basic Concepts and Assumptions of the MRC Family
Part II: Continuous Variables
Linear Multiple Regression
Curvilinear Relationships & Interactions
Simple Mediation and more Advanced Path Models
Part III: Categorical Variables
Categorical Independent Variables: ANOVA, and MRC
MRC with dichotomous DVs

1. Course Number and Title
   PSYC 8104 Advanced Quantitative Analyses for Behavioral Sciences.
   Cross-list as OSCI 8104
2. Course Description (Catalog Description)
   PSYC 8104. Advanced Quantitative Analyses for Behavioral Sciences. (3) Admission to the HPSYC or OS program, or permission of the instructor. Prerequisite: PSYC 8103 or equivalent. A topical course that will focus on selected advance quantitative analyses used within behavioral sciences. Example topics: survival analysis, repeated measures analyses, latent model analyses, multi-level modeling, advanced categorical variable analyses, meta-analysis. May be repeated for credit as topics vary. (On demand).
3. Pre- or Co-requisites
   PSYC 8103 or OSCI 8103 or equivalent.
4. Objectives of the course
   Will vary by topic.

5. Instructional Method
   Will vary somewhat by topic, but expected to involve a combination of lecture, discussion, and activities/assignments.
6. Means of student evaluation
   Will vary by topic.
7. Specify policies that apply to this course:
   a. University integrity
   Students have the responsibility to know and observe the requirements of "The UNC Charlotte Code of Academic Integrity." The most recent edition of the Code is included in the UNC Charlotte Graduate catalog at http://graduateschool.uncc.edu/academics/catalog.html under the "University Regulation and Student Conduct" section.
   Diversity Statement: UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability / disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation and socio-economic status
   Disability Services: Students with documented disabilities are eligible to receive assistance from the Office of Disability Services. For detailed information, contact the Office of Disability Services, located in Fretwell 230.
   b. Attendance
   Required.
   c. *Grading policy*
   Final grades are based on the proportion of total points earned: A > 90%; B > 80%; C > 70%; U < 70%.
   d. *Additional requirements*
   None.
8. Probable textbooks or resources
   Will vary by topic.
9. Topical outline of course content
   Will vary by topic.

ATTACHMENT G2

Library Consultation

Course/Program: PSYC8102: Research Methodologies in Behavioral Sciences

Summary of Librarian's Evaluation of Holdings:

Evaluator: Frada Mozenter Date: March 21, 2011

Please Check One:

Holdings are superior	_____
Holdings are adequate	_____
Holdings are adequate only if Dept. purchases additional items.	_____
Holdings are inadequate	_____

Comments:

This is a name change only.

Course/Program: PSYC8103: Basic Quantitative Analysis for Behavioral Sciences

Summary of Librarian's Evaluation of Holdings:

Evaluator: Frada Mozenter Date: March 21, 2011

Please Check One:

Holdings are superior	_____
Holdings are adequate	_____
Holdings are adequate only if Dept. purchases additional items.	_____
Holdings are inadequate	_____

Comments:

This is a name change only.

Course/Program: PSYC8104: Advanced Quantitative Analysis for Behavioral Sciences

Summary of Librarian's Evaluation of Holdings:

Evaluator: Frada Mozenter Date: March 21, 2011

Please Check One:

Holdings are superior	____
Holdings are adequate	__X__
Holdings are adequate only if Dept. purchases additional items.	____
Holdings are inadequate	____

Comments:

The library has adequate monograph resources in research design and statistical methods to support this course. However, additional monograph resources should be ordered as funding permits in specific area such as multi-level modeling, latent model analysis, etc.

ATTACHMENT G3

Consultation with other Units

UNCCHARLOTTE
The University of North Carolina at Charlotte
9201 University City Boulevard
Charlotte, NC 28223-0001

Organizational Science
Phone: 704-687-4742

March 7, 2011

Dear Dr. Gil Rivas

On behalf of the Organizational Science program and faculty you have our support for this curriculum revision proposal involving the following courses:

PSYC 8102 (will be cross-listed as OSCI 8102)
PSYC 8103 (will be cross-listed as OSCI 8103)
PSYC 8104 (will be cross-listed as OSCI 8104)

These changes not only improve our offerings, but create more efficiencies between HPSY and OS.

Thanks much,

Steven G. Rogelberg, Ph.D.
Professor and Director, Organizational Science