**SYLLABUS**

CTMU 7970 / 7976

***Quantitative Research in Music Education***

**Instructor:** Nancy H. Barry, Ph.D.

**Office:** 5040 Haley Center

**Phone:** 334-844-6787end\_of\_the\_skype\_highlighting **email:** barrynh@auburn.edu

**Required Text:**

***How to Use PASW Statistics: A Step-by-Step Guide to Analysis and Interpretation*** *(Sixth Edition),by Brian C.Cronk*

*$39.95; ISBN 1-884585-92-2; © 2010; 136 pages*

**Recommended Supplemental Texts:**

**SPSS® Basics: Techniques for a First Course in Statistics** (Second Edition)
by Zealure C. Holcomb

$42.50; ISBN 1-884585-82-5; © 2009; 186 pages

**Interpreting Basic Statistics: A Guide and Workbook Based on Excerpts from Journal Articles** (Sixth Edition)
Zealure C. Holcomb

$42.50; ISBN 1-884585-91-4; © 2010; 192 pages

**Course Objectives** *The Student will be able to . . .*

* Define standard statistical/quantitative research terminology
* Create a data file with appropriate variables and labels
* Use SPSS/ PASW to create appropriate charts and graphics for data interpretation
* Select and run appropriate SPSS/ PASW procedures for data analysis including: Frequencies, Descriptives, Crosstabs, Case Summaries, ANOVA, Correlations, Regression, Non-parametric Statistics, Discriminant Analysis, Factor Analysis, and Reliability
* Interpret SPSS/ PASW output in relation to research questions and hypotheses
* Develop appropriate research designs to address research questions in music education

**Graded Assignments**

10 Practice Application Assignments (10 @ 5% = 50%)

Test 1 (15%)

*Class notes and assigned readings. Test format will include matching, fill-in-the-blank, and short answer items.*

Data Analysis Skills Check Up (15%)

*By appointment with instructor. Students will demonstrate fluency with SPSS/ PASW statistics software by completing a series of selected data analysis tasks.*

Test 2 (15%)

*Class notes and assigned readings. Test format will include matching, fill-in-the blank, and short answer items.*

Class Participation and Attendance (5%)

**Grading System:**

A = 100 – 91

B = 90 – 81

C = 80 – 71

D = 70 – 61

It is the policy of Auburn University and of this instructor to accommodate special needs. Students who need special accommodations in class, as provided for by the American Disabilities Act, should arrange a confidential meeting with the instructor during office hours the first week of classes - or as soon as possible if accommodations are needed immediately. You must bring a copy of your Accommodation Memo and an Instructor Verification Form to the meeting. If you do not have these forms but need accommodations, make an appointment with The Program for Students with Disabilities, 1244 Haley Center, 844.2096 (V/TT).

CTMU 7970 / 7976

***Quantitative Research in Music Education***

**SPRING 2011 CALENDAR\***

*\*This Calendar may be changed when it is deemed in the best interest of students to do so. Any necessary adjustments to the course calendar will be announced in advance.*

|  |  |  |
| --- | --- | --- |
| **DATE** | **TOPIC** | **ASSIGNMENT (Due Date)** |
| 1/13/11 | Review of statistical/research terminologyLevels of dataVariable types, names, and labelsData Files |  Discussion Topics #1Data CodebookResearch Abstract #1  |
| 1/20/11 | Descriptive StatisticsFrequenciesDescriptivesSPSS Statistics Coach | Read Chapters 1- 3Application Assignment 1 |
| 1/27/11 | GraphicsChart BuilderCrosstabulations | Read Chapter 4Application Assignment 2  |
| 2/3/11 | Sorting and Selecting DataCase Summaries |    |
| 2/10/11 | Prediction and AssociationRelationship VS CausationCorrelationRegression | Read Chapter 5Application Assignment 3   |
| 2/17/11 | Experimental ResearchParametric Inferential Statistics*t* TestANOVAANCOVAMANOVA | Read Chapter 6    |
| 2/24/11 | **TEST 1** |   |
| 3/3/11 | SPSS Results CoachDraft Viewer | Application Assignment 4  |
| 3/10/11 | Non-Parametric Statistics   | Read Chapter 7Application Assignment 5 |
|  |  |  |
| 3/17/11 | SPRING BREAK |  |
| 3/24/11 | Test Construction  | Read Chapter 8Application Assignment 6 |
| 3/31/11 | Discriminant Analysis  | Application Assignment 7 |
| 4/7/11 | Cluster AnalysisHypothesis Testing | [Application Assignment 8](http://faculty-staff.ou.edu/B/Nancy.H.Barry-1/6242Asgn.html) |
| 4/14/11 | Factor AnalysisTransforming Data Values (Compute, Recode) | [Application Assignment 9](http://faculty-staff.ou.edu/B/Nancy.H.Barry-1/6242Asgn.html)  |
| 4/21/11 | [Reliability & Validity](http://faculty-staff.ou.edu/B/Nancy.H.Barry-1/valid.html)[Reliability Analysis](http://faculty-staff.ou.edu/B/Nancy.H.Barry-1/relanal.html)[SPSS Syntax Editor](http://faculty-staff.ou.edu/B/Nancy.H.Barry-1/syntax.html) |  [Application Assignment 10](http://faculty-staff.ou.edu/B/Nancy.H.Barry-1/6242Asgn.html)   |
| 4/28/11 | **TEST 2** |  |
| 5/5/11 | *EXAMS* |  *Skills Check Up* Must Be Completed |