The Evergreen State College
Graduate Program in Public Administration
Advanced Research Methods, Winter 2012 (Course #: 20283), rev 1/9/12
Feb 17-19 & Mar 2-4, '12: Fridays, 5-9pm; Saturdays and Sundays, 9am-5pm
Location: General Computing Classroom & Lib 1412 (Sundays, 9:00 am-noon)

Our students, faculty, and staff create learning communities to explore and implement socially just, democratic public service.

Faculty	Email	Phone	Office	Office hours
Steve Marshall	marshals@evergreen.edu	(360) 413-5755	Lab 1	By Appointment

Overview: Advanced Research Methods examines advanced and multivariate statistical methods from a practical viewpoint using SPSS and Microsoft Excel. Our aim is to introduce students to a variety of statistical research techniques as well as enhance their ability to read and interpret research findings.

Though this course takes place over of two intensive weekends, the learning will not be hurried. Our focus will be on becoming better users and readers of research and workplace data. Our task – and it is an important task – is to learn how to analyze data sensibly and in context to enhance decision-making and organizational performance.

Learning Objectives: As determined collaboratively, our learning objectives are:

1) Develop and achieve familiarity and competency with the concepts and application of advanced quantitative methods typically used in administrative, service, and policy arenas. This includes both the statistical procedures and software applications (e.g., SPSS and Microsoft Excel).
   a. Understand how to use these in research of our own design.
   b. Know what questions to ask of data; the techniques to use to ask the "right" questions and how to interpret the findings (puzzle-solving).
2) Develop facility with interpreting the use of these methods in research done by others; be able to understand when the methods are applied appropriately and what the results do and do not tell us.
3) Make meaning of research output.
4) Increase proficiency with SPSS and Microsoft Excel's Analysis ToolPak (skills which can be transferred to other environments).
5) If time allows, increase proficiency with other research methods including sampling, secondary data analysis, and statistical process control.

Assignments: Credit will be awarded on the following:

1) Attendance/active participation: The majority of the work and learning will take place during class. Students are expected to attend and be actively engaged in every session. Students are expected to do the work outside of class needed to be actively engaged in class.
2) Evidence of learning – homework: As the learning in a program such as this is intense and sequential, and students want to develop facility in using advanced quantitative methods, the majority of the work for this program will take place through class work. Therefore, reviewing, preparing and discussing weekly assignments are crucial evidence of learning.
3) Evidence of learning – research paper: Students must individually write one brief (4-5 pages, double-spaced, excluding SPSS and/or Excel outputs) research methods paper that models AMSM format and presentation of research result. Include the research description and discuss

analysis (to include screenshots of outputs). In addition, students must present (10-15 minutes), in small groups, the result of homework exercises at least once during class.

Students must be prepared to discuss assigned research articles and complete assignments that may emerge throughout the quarter as a result of our studies.

Text: Mertler, Craig A. & Rachel A. Vannatta (2010). Advanced and Multivariate Statistical Methods: Practical Application and Interpretation. (Fourth Edition). Pyrczak Publishing.

SPSS: Students must have access to SPSS to complete exercises, class work, and related research, as well as Microsoft Excel Analysis ToolPak. The program will provide laptops (with current versions of SPSS and Excel ToolPak) for use during classroom sessions – purchase of these software is optional.

Credit: Students will receive 4 graduate credits based upon satisfactory and on-time completion of all course requirements and assignments. The faculty member makes credit denial decisions. No partial credit will be awarded. Plagiarism, failing to complete one or more assignments, completing one or more assignments late (without having made special arrangements in advance of the due date) or a non-excused absence may constitute automatic denial of credit.

Evaluation: Each student is expected to participate in the end of quarter evaluation conference with faculty. Students are expected to provide a written evaluation of their faculty member. Your evaluation of the faculty can be given to the program secretary. All students will receive a written evaluation of their academic performance by their faculty.

Behavior Expectation: Having respect for others is fundamental to having open, educational dialogue. All students are expected to support and contribute to a well functioning MPA classroom learning community. Behavior that disrupts the learning community may be grounds for disciplinary action, including dismissal from the MPA program.

Covenants: In furtherance of our learning community, we expect students and faculty to:

1) Act in accordance with the Evergreen Contract and Student Conduct code.
2) Promote a cooperative, supportive atmosphere within the community; give everyone opportunity for self-reflection and expression.
3) Use high standards in reading the text and preparing papers, lectures, and comments in seminar.
4) Handle all disputes in a spirit of goodwill.

Both students and faculty agree to discuss any problems involving others in the learning community directly with the individuals involved, with the right to support from other program members during those discussions, if that seems helpful. For example, students must first discuss any problems involving a faculty member directly with the person in question; other faculty will refrain from discussing details of any such problem except in the above format.

NOTE: Sunday morning classes from 9:00 am – noon will be in Lib 1412.

Schedule: Week # – Date	**Reading Assignment (Before Class)**	**In Class Assignment**
Friday, Feb 17 Syllabus, Overview of Basics Getting Acquainted: SPSS & Excel Describing & Screening Data, Statistical Significance	Read: Chapters 1-3 Discuss: Chapters 1-3 and introduce Chapters 4-5	Exercises for Chapters 2&3

Saturday, Feb 18 Correlation/Significance of Correlation Analysis of Variance (ANOVA)/t-Tests	Read: Chapters 4-5 Discuss: Chapters 4-5 and introduce Chapter 6-7	Exercises for Chapters 4&5
Sunday, Feb 19 Analysis of Covariance (ANCOVA), Multiple Analysis of Variance (MANOVA) Covariance (MANCOVA), and Multiple Regression	Read: Chapters 6-7 Discuss: Chapters 6-7 and introduce Chapter 8-9	Exercises for Chapters 6&7

Friday, Mar 2 Multiple Regression (cont.) Path Analysis	Read: Chapters 8 Discuss: Chapter 8 and introduce Chapters 9-10	Exercises for Chapter 8
Saturday, Mar 3 Factor Analysis and Discriminate Analysis	Read: Chapters 9-10 Discuss: Chapters 9-10 and introduce Chapter 11	Exercises for Chapters 9-10
Sunday, Mar 4 Logistic Regression Presentations Summary	Read: Chapter 11 Discuss: Chapter 11	Exercises for Chapter 11

EVALUATION WEEK: MARCH 15-19

Questions to Consider (Answer) When Evaluating Research Articles and Studies:

In addition to considering the methodological questions set forth in the text, for this program it is particularly important that you focus on analytical questions.

To the best of your ability, evaluate the appropriate use of the analytical tools:

1) Are the hypotheses/assumptions clear?
2) Was the appropriate method chosen? If not, what would you recommend?
3) Did the author(s) use and present the results appropriately?
4) Did the author(s) interpret the results appropriately? Do the conclusions follow?
5) What else?