

Advanced Research Methods
MPA elective, Winter 2011
Mondays 6:00pm-10:00pm, Location: Sem II B2109

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Course Moodle Website: Will be accessed through your **my.evergreen.edu** site

“You must be the change you wish to see in the world.”-- Mohandas K. Gandhi

TESC MPA Mission Statement: Our students, faculty and staff create learning communities to explore and implement socially just, democratic public service. We *think* critically and creatively; *communicate* effectively; *work* collaboratively; *embrace* diversity; we *value* fairness and equity; *advocate* powerfully on behalf of the public; and *imagine* new possibilities to accomplish positive change in our workplaces and in our communities.

Fall 2010 Course Description:

Advanced Research Methods, a required course for the MPA Policy concentration, examines advanced and multivariate statistical methods from a practical viewpoint. The aim is to introduce students to the most used statistical techniques and research designs in state government that will allow users to understand the complexities that are critical to the research/policy question. Students can expect to learn enough about complex design and techniques to be able to know what technique to request, to understand the use of designs and techniques and to interpret complex research output. In addition, students will develop their ability to use many of the advanced analysis features embedded within Excel.

Winter 2010 Learning Objectives:

Our objective is to provide an introductory survey of the application and interpretation of descriptive and inferential statistics. This will involve a commitment to the homework as well as the learning component in our weekly class.

Readings may require more than one pass at the material. Assignments are designed to allow you to practice and develop an understanding of the material. Expect to work steadily throughout the term. The optional Excel workbook is there for your benefit. It closely matches the excel work in our text. If you've not used excel in your work or previous classes please pick up a copy and use it as we move through the material. All assignments must be completed and turned in on time.

Books Fall 2010 (required):

1. **Statistical Techniques in Business and Economics**, 14th edition, by Lind, Marchal and Wathen. ISBN: 978-0-07-340176-8.
2. **A Mathematician Reads the Newspaper** [Paperback], by John Allen Paulos, **ISBN-13:** 978-0385482547.

Books Fall 2010 (optional):

1. **Basic Statistics Using Excel 2007**, 14th edition, by Lind, Marchal and Wathen, Prepared by Merchant, Goffinet-Meenach, and Koehler. ISBN: 978-0-07-727001-8.

Articles and additional reading TBD.

Tentative Winter 2011 Schedule A More detailed schedule will be posted after the first class. During the first class we will discuss additional subjects identified by students to be covered in the ten weeks. Assignments, additional readings and an updated schedule with seminar will be posted on our Moodle website throughout the quarter.

DATE	TOPIC	READINGS & Activities
Week 1 1/3	<i>Statistics and describing data</i>	Lind: Chaps 1-3 inclusive
Week 2 1/10	<i>Displaying data and Probability</i>	Lind: Chaps 4,5
Week 3 1/17	<i>More Probability</i> (Holiday Week)	Lind: Chaps 6,7
Week 4 1/24	<i>Sampling</i>	Lind: Chapt 8
Week 5 1/31	<i>Confidence Intervals and Sampling Methods</i>	Lind: Chaps 9,10
Week 6 2/7	<i>Linear Regression</i>	Lind: Chapt 13
Week 7 2/14	<i>Multiple Regression</i> (Holiday Week)	Lind: Chapt 14
Week 8 2/28	<i>Indexing and Forecasting</i>	Lind: Chaps 15,16
Week 9 3/7	<i>Nonparametric Tests</i>	Lind: Chaps 17,18
Week 10 Thurs: 2/14	<i>Statistical Quality Control and Decision Theory</i>	Lind: Chaps 19,20

Evaluation Week: Written evaluations (self & faculty) required.

Assignment #1: Homework

Due: Week 1, Released Thursday Dec 23 2010. Read the first three chapters of Lind, Marchal and Walthal. Be prepared to discuss what you would like to gain from the class and what specific readings or material you would like to see in the class.

Format: Any papers to be turned in should be typed, double spaced (unless otherwise stated), 12 point font, and follow APA format (see Hacker, 2009). All written work will be of high quality, grammatically correct, clear and without spelling errors. If you require it, please request resource writing assistance from faculty and/or contact the Writing Center.

Late assignments: Turning in assignments late is unacceptable. However, if there is a need to turn in an assignment late, the student should contact their seminar faculty no later than the original assignment due date to discuss options. Parameters are left to the discretion of the faculty on a situation-by-situation basis. Late assignments must be completed by the end of the quarter the assignment was originally due to ensure full receipt of course credit.

Participation & Attendance: Students are required to attend each class meeting. Participation includes focusing on class content, speaking in class and seminar, listening to others, taking notes, completing class interactive exercises, avoiding distractions, and listening to and dialoging with the guest speakers. If an absence is unavoidable, seminar faculty should be notified prior to a class and/or seminar absence. After one absence per quarter, make-up work may be assigned at faculty discretion, case-by-case. Makeup work must be completed by the end of the quarter in question to ensure full receipt of course credit.

Credit: Students will receive 4 graduate credits at the completion of the quarter if all course requirements have been satisfactorily completed to meet course objectives. No partial credit will be awarded. Incompletes may be offered on case by case basis. Refer to MPA student handbook. Credit denial decisions will be made by the faculty. Plagiarism (i.e., using other peoples' work as your own), failing to complete one or more assignments, completing one or more assignments late (without having made arrangements *before* the due date), or multiple absences may constitute denial of total credit. Unexcused absences or lack of academic work may result in no credit at the discretion of the faculty. Students will also be evaluated based upon their progress towards the learning goals that will be assessed from classroom, seminar, and assignment performance. The faculty makes decisions for no credit when necessary, based on absence or failure to meet academic course requirements.

Evaluation: Written self-evaluations and a seminar faculty evaluation are required for credit, at the end of each quarter along with faculty evaluations of students. Student evaluations of their faculty are due the time of your evaluation conference. (Students may elect to submit faculty evaluations to faculty directly or to Program Secretaries: Ruth Joynes & Pat Kolstad.)

Multiculturalism & Diversity: Faculty and students will actively work towards contextually weaving multiculturalism and diversity throughout our learning as related to readings, lectures, seminar and group projects. In a learning community students and faculty share the responsibility for the teaching and learning environment. We are all encouraged to add to the existing format and content by incorporating relevant professional experiences in dialogue and by presenting current events regarding public service. Multiculturalism and diversity is to be understood as: aiming to promote constructive community discourse about issues of culture, power and life-style differences including but not limited to race, ethnicity, color, nationality, sex, gender, gender identity, gender expression, class, sexual orientation, age, religion, (dis)ability, and veteran status.

Learning Styles: We all have different ways of acquiring new knowledge. Therefore, faculty will actively work towards providing information in multiple formats: tactile, auditory, visual, experiential, etc. However, style applications are limited to means appropriate for the classroom environment. (Activities such as surfing the internet, reading unrelated materials, playing with a PDA, IPOD, laptop, or cell phone are not appropriate.) Consult your seminar faculty to discuss learning style options or personal challenges.

Accommodations will be provided for any student who desires them through a working relationship with Access Services, the Writing Center and the Quantitative and Symbolic Reasoning Center. To request academic accommodations due to a disability; please contact the office of Access Services for Students with Disabilities (867-6348 or 6364). If the student is already working with the office of

Access Services the faculty should have received a letter clearly indicating the student has a disability that requires academic accommodations. If any student has a health condition or disability that may require accommodations in order to effectively participate in this class, please do the following: Contact faculty after class and/or Contact Access Services in Library 1407-D, 867-6348. Information about a disability or health condition will be regarded as confidential. Please refer to TESC's Students With Disabilities Policy. <http://www.evergreen.edu/policies/g-studentada.htm>

Expectations of Students and faculty: to promote a cooperative, supportive atmosphere within the community; give everyone opportunity for self-reflection and expression; use high standards in reading the text and preparing our papers, lectures, and comments in seminar; handle all disputes in a spirit of goodwill. Discuss any problems involving others in the learning community directly with the individuals involved (so long as the concerned party feels safe doing so).

We will abide by the social contract: WAC 174-121-010 College philosophy.
<http://apps.leg.wa.gov/WAC/default.aspx?cite=174-121-010>

We will abide by the student conduct code (including academic integrity and plagiarism):
Chapter 174-120 WAC
Student Conduct Code & Grievance/Appeals Process
<http://search.leg.wa.gov/wslwac/WAC%20174%20%20TITLE/WAC%20174%20-120%20%20CHAPTER/WAC%20174%20-120%20%20CHAPTER.htm>

We will abide by the non-discrimination policies and procedures at TESC:
<http://www.evergreen.edu/policies/g-nondiscr.htm>

Guest Policy: Guests are welcome to visit our learning community during class time and seminar meetings with discretionary approval from course faculty in advance of the requested visit. It is the host student's responsibility to contact the faculty with details about the requested guest visit and await approval. Guests must abide by all social contract conduct code, and nondiscrimination policy guidelines as aforementioned in this syllabus.

Inclement Weather: In the event of bad weather or emergencies students should check with television or radio stations for announcements of campus closures. Students can also call the main campus line 867-6000 to get the latest news regarding a campus closure or delay. Since many students in the program travel from relatively distant locations, faculty may decide to cancel program meeting even if campus is open. If we do this we will send an all-program email prior to 3:00 pm. You are responsible for checking your email.