



## **POLS 5377 The Scope and Method of Political Science**

Fall 2017, Online (3 Credit hours)

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Office: CHSS 496D

Office Hour: Tuesday & Thursday: 1 – 4 pm or **by appointment**<sup>1</sup>

### **Course Description**

This course covers the concepts and processes of scientific research in the disciplines of political science and public administration. The purpose of the course is to help students understand the elements of scientific research and use data analysis tools to interpret and present information used to support decision making in public, nonprofit and private sectors. With a focus on the use of descriptive and inferential statistics, students enrolled in this course will also learn how to use SPSS statistic software to process and analyze statistical data. This course requires students to complete weekly assignments, book reviews, examinations and a group project.

### **Course Objectives**

After taking this course, student will be able to:

1. Identify the elements and process of conducting scientific research;
2. Evaluate the quality of scientific research;
3. Recognize the importance of data visualization;
4. Apply appropriate analytical tools to different types of quantitative data;
5. Interpret statistical reports and recognize the limitation of quantitative data;
6. Use SPSS to arrange data, conduct analysis, and interpret and present the data

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<sup>1</sup> All times mentioned in this syllabus are CST.

## Teaching Materials:

### Required readings:

Ayres, I. (2007). *Super crunchers: Why thinking-by-numbers is the new way to be smart*. Bantam Books.

Huff, D. (2010). *How to lie with statistics*. WW Norton & Company.

The two books listed above are required for completing the book review assignments that are scheduled on Week 6 and Week 11. Feel free to purchase used books on the Internet.

### Required Statistical Software Package

SPSS 22.0 or higher (Statistics Base GradPack)

Note: this is the SPSS data analysis software. I will use SPSS 22.0 for my lecture. SPSS 24.0 is the latest version of the software, which is similar to SPSS 22.0. There should be no problem of using either version in our course. You can find both SPSS 22.0 and SPSS 24.0 on-line for six-month rental (the price may vary depending on the version and distributors). The rental license will allow you to load the software on your personal computer and use it for 6 months. You can also use SPSS 22.0 at any of SHSU computer labs.

Information about SPSS and List of official distributors:

<http://www-03.ibm.com/software/products/en/spss-stats-gradpack>

We will start using the software the week of September 4th. SPSS is installed on all computers on SHSU campus, including Woodland and Huntsville campus. However, since most of you are taking this course remotely and not able to visit campus regularly, please take the time to get the software installed on your personal computer.

### Weekly learning materials

As each week's topic unfold, I will provide you the correspondent reading materials via Blackboard.

## Contacting the Professor

Courses about statistics can be stressful for students. The goal of this course is to help you navigate and master these concepts in a straight forward manner. Feel free to contact me via email if you have any questions during the semester. In general, I will attempt to respond to you within 24 hours from Monday to Friday.

## **Course Policies**

Students (and the professor) will conduct themselves honorably throughout the course. We will treat each other with respect and dignity and create an atmosphere online in which open discussion and debate can take place.

### Attendance Policy

Students are expected to access the course website and check the university email account at least once a week. It is your responsibility to check the weekly topics, materials, assignments, and announcements posted on our course's Blackboard site. An Early Warning will be given to those who do not access the Blackboard site on a weekly basis. If there is a period where you are not able to access the Blackboard site during a given week, you must notify the professor of your absence.

### Academic Dishonesty

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials. If you have any questions about academic dishonesty, please take time to read SHSU policy on academic integrity, which is posted online.

Note: I would like to mention that providing the right answers to an exercise, problem set or examination on the course discussion board, or elsewhere, is considered to a violation of the course conduct.

### Religious Holy Days

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. Section 51.911 (a) (2) defines a religious holy day as: "a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20...." A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. For a complete listing of the university policy, see:

<http://www.shsu.edu/dept/academic-affairs/documents/aps/students/861001.pdf>

### Student Disability Services Statement

It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail [disability@shsu.edu](mailto:disability@shsu.edu)). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register with the Services for Students with Disabilities. For a complete listing of the university policy, see: <http://www.shsu.edu/dotAsset/7ff819c3-39f3-491d-b688-db5a330ced92.pdf>

### Instructor Evaluations

Students are encouraged to participate in course/instructor evaluation near the end of the semester.

### **Blackboard**

The entire course will be conducted on the Blackboard. If you are new to Blackboard, I would recommend you to visit the website “[Blackboard Orientation](#).” Once you log on to the course site on Blackboard, you can access the website by clicking the link in the panel on the left. The website provides you the instructions of how to access course materials, communicate with classmates and your professor, submit assignments, take tests and check your grades.

During the semester, if you have any technical problems that you cannot resolve, please contact the SHSU Online Support Desk, using the information below:

#### Call Phone

936-294-2780

M-F: 7 am – Midnight

Saturday: 8 am – 8 pm

#### Live Chat

[SHSU Online Support Desk](#)

M-F: 7 am – Midnight

Saturday: 8 am – 8 pm

#### Send Email

[blackboard@shsu.edu](mailto:blackboard@shsu.edu)

M-F: 7 am – Midnight

Saturday: 8 am – Midnight

## Assignments and Examinations

The class will involve assignments, book reviews, examinations and a group final project. To receive full credit, all assignments and examinations must be turned in by noon on their respective due date. Computer-related problems (i.e., "my email isn't working" or "I wasn't near my computer") are not acceptable excuses for late assignments. Assignments turned in late will be deducted 10% of their total point value for each day late. For example, an assignment worth 10 points that is turned in two days late will be deducted 2 point.

Assignments (40%): There will be 10 assignments throughout the semester. You may receive the score between 10 and 0 for each assignment. These assignments will help you to check if you fully understand topics discussed during the session and prepare you for the examinations. Each student will be assigned to a study group. You can work with your study partners on the assignments, but you still have to complete and submit your own assignment. Please do not hesitate to contact me if you have any questions.

Examinations (30%): There are two examinations that are scheduled on Week 7 and Week 13. The examinations will be available between Monday and Sunday during the week. You can take the exam at any time while it is available, however, once you begin the exam, you must complete it within the stated time period. While taking the exams, you can refer to course materials, notes and assignments, but not discuss the materials with your classmates or consult with other people. Please remember that all students are expected to comply with SHSU policy on academic integrity.

Book Reviews & Discussion (10%): During the semester, students will review and discuss two books, *Super Crunchers* (Week 6) and *How to Lie with Statistics* (Week 13). Each student should read the book and make a book review post on the discussion board, and respond to at least two colleagues' posts. You will find the Book Review post guide and grading rubric on Blackboard.

Group Final Project (20%): Each study group will complete one group project and submit it on Week 16. I will provide each group with the documents (such as academic articles, research reports, news reports, or governmental documents) that contains quantitative data. Each group will review, summarize and evaluate the quality of the information presented in each of the documents, and write a final report. The detailed guideline and grading rubric of the final project will be posted on Blackboard.

## Grading

Grades are awarded to reflect students' performance on assignments and examination. My ultimate goal is for each student to earn an A in this course by demonstrating that they have achieved mastery of the course material. This course will be graded on a 100-point scale as follows:

|   |                 |
|---|-----------------|
| A | 90.00 – 100.00  |
| B | 80.00 – 89.99   |
| C | 70.00 – 79.99   |
| F | 69.99 and lower |

Student grades in this course will be based upon the following considerations:

|                           |     |
|---------------------------|-----|
| Assignments               | 40% |
| Examinations              | 30% |
| Book Reviews & Discussion | 10% |
| Group Final Project       | 20% |

## Weekly Schedule<sup>2</sup>

I will provide video lectures on the material that I consider to be critical or difficult. Students are expected to understand and use the other assigned course material. If you have questions, do not hesitate to contact me. I like to answer questions.

| Week                            | Topics & Activities   | Note          |
|---------------------------------|---|---------------|
| <b>Week 1<br/>(8/23 – 8/27)</b> | <u>Overview</u> <ul style="list-style-type: none"> <li>Familiar with the course syllabus, requirements and Blackboard</li> <li>Why public managers need to know statistics?</li> <li>Make a post: knowing yourself and your colleagues</li> </ul> | Assignment #1 |
| <b>Week 2<br/>(8/28 – 9/3)</b>  | <u>Scientific Research</u> <ul style="list-style-type: none"> <li>Purpose of science research</li> <li>Qualitative and Quantitative research methods</li> <li>Elements of research design</li> </ul>  | Assignment #2 |

<sup>2</sup> Course schedule may be revised as needed.

|  |  |               |
|--|--|---------------|
|  | <ul style="list-style-type: none"> <li>Reliability &amp; Validity</li> </ul>   |               |
| <b>Week 3</b><br><b>(9/4 – 9/10)</b>     | <u>Conducting Research</u> <ul style="list-style-type: none"> <li>Research methods</li> <li>Data collection</li> <li>Level of measurement</li> <li>Basic descriptive statistics</li> <li>Introduction of SPSS</li> </ul>   | Assignment #3 |
| <b>Week 4</b><br><b>(9/11 – 9/17)</b>    | <u>Descriptive Statistics</u> <ul style="list-style-type: none"> <li>Measures of Central Tendency</li> <li>Measures of Dispersion</li> <li>Operating SPSS</li> </ul>   | Assignment #4 |
| <b>Week 5</b><br><b>(9/18 – 9/24)</b>    | <u>Data Presentation</u> <ul style="list-style-type: none"> <li>Contingency Tables</li> <li>Tables, charts and presentations</li> </ul>  | Assignment #5 |
| <b>Week 6</b><br><b>(9/25 – 10/1)</b>    | <u>Book Review</u> <ul style="list-style-type: none"> <li>Review “Super Crunchers” and Discuss</li> </ul>  |               |
| <b>Week 7</b><br><b>(10/2 – 10/8)</b>    | <u>Examination 1</u> <ul style="list-style-type: none"> <li>Covers material between Week 2 and Week 6</li> <li>Exam questions will be available on Blackboard on Monday 10/2</li> <li>Exam due on Sunday 10/8 at 11:59pm.</li> <li>Late Submission will not be accepted</li> </ul> |               |
| <b>Week 8</b><br><b>(10/9 – 10/15)</b>   | <u>Inferential Statistics</u> <ul style="list-style-type: none"> <li>Descriptive vs Inferential Statistics</li> <li>Sampling methods and sampling distribution</li> <li>Normal Curve &amp; probabilities</li> <li>Confidence interval</li> </ul>                                   | Assignment #6 |
| <b>Week 9</b><br><b>(10/16 – 10/22)</b>  | <u>Hypothesis Testing I</u> <ul style="list-style-type: none"> <li>Logic of hypothesis Testing</li> <li>Significance test</li> <li>T-test</li> <li>SPSS operation</li> </ul>   | Assignment #7 |
| <b>Week 10</b><br><b>(10/23 – 10/29)</b> | <u>Hypothesis Testing II</u> <ul style="list-style-type: none"> <li>ANOVA</li> <li>SPSS operation</li> </ul>   | Assignment #8 |

|  |  |                |
|--|--|----------------|
| <b>Week 11</b><br><b>(10/30 – 11/5)</b>  | <u>Hypothesis Testing III</u> <ul style="list-style-type: none"> <li>• Chi Square</li> <li>• SPSS operation</li> </ul>   | Assignment #9  |
| <b>Week 12</b><br><b>(11/6 – 11/12)</b>  | <u>Measurement of Association</u> <ul style="list-style-type: none"> <li>• Correlation &amp; Regression Analysis</li> <li>• SPSS operation</li> </ul>  | Assignment #10 |
| <b>Week 13</b><br><b>(11/13 – 11/19)</b> | <u>Book Review</u> <ul style="list-style-type: none"> <li>• Review “How to Lie with Statistics” and Discuss</li> </ul>   |                |
| <b>Week 14</b><br><b>(11/20 – 11/26)</b> | Thanksgiving Holiday   |                |
| <b>Week 15</b><br><b>(11/27 – 12/3)</b>  | <u>Examination 2</u> <ul style="list-style-type: none"> <li>• Covers material between Week 2 and Week 13</li> <li>• Exam questions will be available on Blackboard on Monday 11/27</li> <li>• Exam due on Sunday 12/3 at 11:59pm.</li> <li>• Late Submission will not be accepted</li> </ul> |                |
| <b>Week 16</b><br><b>(12/4 – 12/8)</b>   | <u>Group Final Project</u> <ul style="list-style-type: none"> <li>• Submit by Friday 12/8 at 11:59 pm.</li> </ul>  |                |

## Other University Resources

### The Counseling Center

Sometimes as a university student, you might feel the need to talk to someone who can help you better understand decisions you face or those you have made. The on-campus Counseling Center provides you with a welcoming, confidential place to discuss your challenges and concerns with a professional counselor. Call 936-294-1720 for an appointment or go to <http://www.shsu.edu/dept/counseling/>.

\*The instructor reserves the right to revise the syllabus.