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| Image result for southern oregon university emblem | **Summer Language Institute (Guanajuato, Mexico)****Southern Oregon University**Master of Arts in Spanish Language Teaching**FL 501:** **Data Exploration and Analysis**Class time: online asynchronous classesApril 1, 2024 - May 5, 2024 |
| Professor:  | Dr. Jeremy W. Bachelor  |   |  |
| E-mail: Zoom: | bachelorj@sou.edu heartland.zoom.us/my/jbachelor |
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**FL 501: Data Exploration and Analysis (1 credit)**

**Description:** This course provides a brief introduction to the data analysis process with the goal of helping participants analyze the data to be gathered for their Action Research Projects. In this sense, the course will be very hands on and will require participants to actively think about their Action Research project design in regard to the data to be obtained and how this data will be examined in order to answer their research question(s). Topics to be covered include appropriate research questions, numerical and graphical summaries of data (e.g. bar graphs, pie charts, etc.), hypothesis testing (*t*-tests), and qualitative procedures (e.g. interviews, focus groups, journals, etc.). Participants are not required to have an approved project in mind in order to enroll.

**LEARNING OUTCOMES**

By the end of this course, students will be able to:

1. Identify whether variable data are quantitative or qualitative and the implications of this difference;

2. Explain the measures of central tendency as they apply to data collection and analysis;

3. Summarize quantitative data graphically, using a variety of graph types depending on the type of data involved;

3. Summarize qualitative data using a variety of local measurements depending on the type of data involved;

4. Identify quantitative and qualitative methods to be used in future Action Research projects; and

5 Identify a research problem and develop an appropriate research question.

**COURSE MATERIALS**

Articles, videos, lessons, and data samples will be provided by the course instructor. Students should have access to a reliable computer/tablet with Internet access, speakers, and Microsoft Excel. Microsoft Excel is available for free to all students: [Microsoft Office 365 for Home Use](https://support.sou.edu/kb/articles/microsoft-office-365-for-home-use).

**MOODLE**

As an online course, it is essential that students familiarize themselves with Moodle by completing the orientation module, preferably before the first day of class. Moodle will provide students with weekly instructions, discussion forums, feedback and grades, and course materials.

**ATTENDANCE/PARTICIPATION**

Online attendance will be taken throughout each week during the course. Students must enter Moodle during the first 48 hours of the course and complete an icebreaker activity. Henceforth, students must actively contribute on three separate occasions throughout each of the five weeks, at minimum, preferably at the beginning of the week, midway through the week, and on the weekend. Due to the intense format of this course, missing a week is not allowed. In case of an emergency, please contact the course instructor and the SLI director.

**grading scale**

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| A  | 94 – 100% | C  | 74 – 76% |
| A– | 90 – 93% | C– | 70 – 73% |
| B+ | 87 – 89% | D+ | 67 – 69% |
| B  | 84 – 86% | D  | 64 – 66% |
| B– | 80 – 83% | D– | 60 – 63% |
| C+ | 77 – 79% | F  | 0 - 59% |

**ASSESSMENT BREAKDOWN**

1. Discussion forum – 20%
2. Assignments – 50%
3. Quizzes – 10%
4. Final data summary – 20%

**FINAL DATA SUMMARY**

This assignment will require participants to analyze a data set applicable to their Action Research topic and write out, as explained in class, the results in a clear and meaningful fashion, following APA style guidelines. This assignment will be a “dry run” of sorts of what will be required of students during their Action Research project. The research questions should aim to address an issue/theme/concern that students discovered through SLI coursework.

**FORUM ACTIVITIES AND ASSIGNMENTS**

In terms of activities, these will consist of practical assignments that will be worked on both via file submissions and open discussion forums. These assignments will include the creation of graphs and tables, data summary and analysis, and discussions of data implications.

**WORK LOAD**

In a typical 1 credit course taken over 10 weeks, students attend class for 10 hours total (one hour a week) and are expected to devote 2-3 hours to studying/homework per week. Due to the nature of this accelerated 5-week, 1 credit course, students should plan on spending 6-8 hours a week completing online work, reading, studying, and planning for their upcoming Action Research study.

**FL 501: Data Exploration and Analysis**

**Tentative schedule**

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| **Week** | **Content/Theme** | **Assignments** |
|  | Orientation | Course overview and icebreaker |
| 1 | Data description: Types of data, measures of central tendencySelecting a research problem | 1. Video: Selecting a problem to research 2. Discussion: Brainstorming topics of interest3. Video: What are descriptive statistics?4. Lesson: Research variables5. Quiz 16. Exercise set: Measures of central tendency |
| 2 | Study design and introduction to hypothesis testingAnalyzing data from Likert scalesTools for comparing populations: *T*-tests and effect sizes | 1. Video: Introduction to research design, statistics, tests, and measurement2. Discussion: Planning for a study3. Video: What is a *t*-test? Procedures, interpretations, and examples4: Lesson: Likert scale5. Quiz 26. Exercise set: Data visualization and *t*-tests |
| 3 | An introduction to qualitative data analysisA brief overview of surveys, questionnaires, field journals, and interviewsTriangulation of data | 1. Video: An overview of qualitative research2. Discussion: Qualitative vs. quantitative3. Video: Leading questions, examples and definition4: Lesson: Surveys, field journals, interviews5. Quiz 36. Exercise set: Qualitative data 1 |
| 4 | In depth: Open-ended questionnaires, Interviews, and Observations | 1. Reading: Open-ended questionnaires, Interviews, and Observations (Zacharias, 2012)2. Discussion: Summarizing open-ended questionnaires, interviews, and observations3. Quiz 44. Exercise set: Qualitative data 25. Begin working on final data summary |
| 5 | Putting it all together: Summarizing data and writing up results | 1. Final data summary submission and response2. Discussion post wrap-up |

**RUBRIC FOR ONLINE DISCUSSION BOARD PARTICIPATION**

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| **The quality of your participation will be worth a percentage of your total course grade as indicated in the course grade section.**  | **Points**  |
| ● Professional and academic use of language in posts  | \_\_\_\_ /5  |
| ● Consistently posts topics related to the discussion topic; cites additional references related to the topic when applicable  |  \_\_\_\_ /5  |
| ● Expresses ideas and opinions in a clear and concise manner with obvious connection to the topic  |  \_\_\_\_ /5  |
| ● Displays awareness of the needs of the community; frequently attempts to motivate the group discussion; presents creative approaches to the topic and poses questions to further discussion  |  \_\_\_\_ /5  |
| ● Meets posting minimum/maximum requirements  | \_\_\_\_ /5  |

**RUBRIC FOR FINAL DATA SUMMARY**

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| Student provides research question(s)\* to solve identified problem  | 2.0 |
| Student identifies at least two qualitative procedures to answer research question(s) | 2.0 |
| Student identifies at least one statistical procedure to answer research question(s) | 1.0 |
| Student accurately analyzes data | 5.0 |
| Student effectively presents data | 5.0 |
| Student effectively discusses findings and implications | 5.0 |

\*The research question(s) should aim to address an issue/theme/concern that students discovered through SLI coursework

**After the Data Analysis course (in preparation for the Action Research course)**

*Students are expected to complete the work below before the first day of class during Session I in GTO.*

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| Prior to the first day of class in GTO (Session I) | * Read the entire Action Research textbook (Mills, 2018)
* Create an ORJ journal entry for each chapter (**entries 1-10**)
* Write an area of focus statement and 1-2 research questions that stem from a concern/issue/theme discovered in SLI coursework; describe the possible intervention or innovation of your study; include a brief pre-reflection before your develop your proposal to answer how you would incorporate what you have learned during your degree (e.g. I have a better understanding of SLA, so I am looking at a specific methodology); **ORJ #11**
* Complete “Protecting Human Research Participants Online Course” (takes approximately 3 hours); post certificate of completion to Moodle
* Find several peer-reviewed journal articles that are relevant to your area of research
* Discuss your action research ideas with your department head and/or district administrator
* **Ask for and obtain a letter from your school principal or another administrator in your district that gives you permission to carry out your research project**
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# Syllabus Statements

# Raider Reminder

All students must abide by the [Code of Student Conduc](https://inside.sou.edu/assets/policies/SAD.015-Student-Code-of-Conduct-Rights-and-Responsibilites.pdf)[t](https://inside.sou.edu/assets/ed-health/hpe/docs/Bylaws/Section5-bylaws-final_3-29-2019.pdf) and [Equal Opportunity, Harassment, and Sexual Misconduct Policy](https://inside.sou.edu/assets/policies/GEN.009_Final_2022_v4.pdf). Make sure that any contact with others is wanted, that any recording is done with informed consent of any other party, and that it involves no illegal downloads or activity.

In addition, we remain committed to the [University's mission and values](https://sou.edu/president/vision-mission-values/). We provide a healthy, safe and civil campus; respectful, inclusive, and equitable interactions in all of our learning spaces including physical and virtual classrooms; and no tolerance for racist, sexist, or other forms of hurtful discourse.

## COVID-19

We continue to monitor national and regional developments regarding Covid-related guidelines. Please refer to the [Oregon Health Authority](https://www.oregon.gov/oha/covid19/pages/index.aspx) for guidance on what to do if you test positive for COVID.

## SOU Cares and Equity Grievance Reporting

SOU has a wide range of resources to help you succeed. Our faculty, staff, and administration are dedicated to providing you with the best possible support. The SOU Cares System allows us to connect you with staff members who can assist with concerns and connect you to further available resources. This includes concerns regarding finances, food security, health, housing, mental health, wellbeing, legal concerns, family concerns, study skills, time management, etc. You are also welcome to use the SOU Cares System to share concerns about yourself, a friend, or a classmate. Go to [www.sou.edu/cares](http://www.sou.edu/cares) to submit a note of concern.

The Dean of Students’ Office and the Office of Equity Grievance provide recourse for students through the Student Code of Conduct, Equal Opportunity, Harassment and Sexual Misconduct Policy, and other applicable policies, regulations, and laws. SOU’s Equity Grievance Program addresses concerns about sexual harassment, sexual assault, stalking, intimate partner violence, bias and discrimination for students, staff and faculty. Reports related to sexual misconduct, assault, harassment, or bias may be made anonymously or confidentially by completing [this form](https://sou.co1.qualtrics.com/jfe/form/SV_7R7CCBciGNL473L).

## Academic Honesty Statement and Code of Student Conduct

Students are expected to maintain academic integrity and honesty in completion of all work for this class. According to SOU’s Student Code of Conduct: “Acts of academic misconduct involve the use or attempted use of any method that enables a student to misrepresent the quality or integrity of his or her academic work and are prohibited.”

Such acts include, but are not limited to: copying from the work of another person or source, and/or allowing another student to copy from one’s own work; unauthorized use of materials during exams; intentional or unintentional failure to acknowledge the ideas or words of another individual or source that have been taken from any published or unpublished source; placing one’s name on papers, reports, or other documents that are the work of another individual or source; submission of work resulting from inappropriate collaboration or assistance; submission of the same paper or project for separate courses without prior authorization by faculty members; and/or knowingly aiding in or inciting the academic dishonesty of another. The examples above include the use of any generative artificial intelligence tool such as ChatGPT, Dall-E 2, Stable Diffusion 2, etc. that is inconsistent with the faculty's expressed expectations for the entire course or any assignment. Note that students are responsible for any inaccurate, biased, offensive, or otherwise unethical content they submit regardless of whether or not it makes use of AI in any way*.*

Any incident of academic dishonesty will be subject to disciplinary action(s) as outlined in SOU’s [Code of Student Conduct](https://inside.sou.edu/assets/policies/SAD.015-Student-Code-of-Conduct-Rights-and-Responsibilites.pdf). In case of loss, theft, destruction, or dispute over authorship, always retain a copy of any work you produce and submit for grades. Retain all work that has been graded and returned to you.

## Turnitin Originality Checker

Per SOU’s [Code of Student Conduct,](https://inside.sou.edu/assets/policies/SAD.015-Student-Code-of-Conduct-Rights-and-Responsibilites.pdf) each student’s education is the product of their own intellectual effort and engagement. Breaches of academic integrity compromise the overall quality of scholarship and detract from the value of the SOU degree. In order to provide opportunities for the instructor and students to review their work for originality, instructors may require students to submit all or some of their work to Turnitin. In order to meet this requirement, students must agree to the Turnitin End User License Agreement (EULA). Any work submitted to Turnitin without a EULA in place may not be accepted by the instructor for credit. Although Turnitin may provide your instructor with an "artificial intelligence detection score" for your work along with an originality score, such analysis is highly unreliable and no AI detection software analysis will be used as evidence in relation to Academic Honesty and the Code of Student Conduct. Any student who does not wish to accept the EULA in a course where Turnitin is required should withdraw from the course. [Learn more about Turnitin](https://docs.google.com/document/d/1XxUSm4JS9AYbF_JgjJW0Zbv5Xpxm3yA_Z4zd7W4_HMM/preview) and review the terms and conditions.

## Emergency Notifications

SOU is committed to a safe community. Student, faculty and staff emails are automatically enrolled in SOU Alert, the campus emergency communication system. In the event of emergency, closure, or other significant disruption to campus operations, such as inclement weather, messages are delivered via SOU Alert. To ensure timely notification, students, faculty, and staff are **strongly** encouraged to visit Inside SOU to register their cell phone numbers and/or add family members to the system. Campus Public Safety is available 24 hours/day by dialing 541-552-6911. CPS responds to safety concerns, incidents, and emergencies and can provide safety escorts to on-campus locations. CPS works in collaboration with Ashland Police and Fire.

## Statement on Title IX and Mandatory Reporting

Federal law requires that employees of institutions of higher learning (faculty, staff and administrators) report to a Title IX officer any time they become aware that a student is a victim or perpetrator of gender-based bias, sexual harassment, sexual assault, domestic violence, or stalking. Further, Oregon law requires a mandatory report to law enforcement of any physical or emotional abuse of a child or other protected person, including elders and people with disabilities, or when a child or other protected person is perceived to be in danger of physical or emotional abuse. If you are the victim of sexual or physical abuse and wish to make a confidential disclosure please use [SOU’s confidential advising](https://inside.sou.edu/gsj/reporting-options-survivor-support.html) or SOU’s [Anonymous Harassment, Violence, and Interpersonal Misconduct Reporting Form.](https://sou.co1.qualtrics.com/jfe/form/SV_7R7CCBciGNL473L)

## SOU Academic Support/Disability Resources

To support students with disabilities in acquiring accessible books and materials, and in planning their study and time management strategies, SOU requires all professors to include information regarding Academic Support and Disability Resources on course syllabi. It is the policy of Southern Oregon University that no otherwise qualified person shall, solely by reason of disability, be denied access to, participation in, or benefits of any service, program, or activity operated by the University. Qualified persons shall receive reasonable accommodation/ modification needed to ensure equal access to employment, educational opportunities, programs, and activities in the most appropriate, integrated setting, except when such accommodation creates undue hardship on the part of the provider. These policies comply with Section 504 of the Rehabilitation Act of 1974, the Americans with Disabilities Act of 1990, and other applicable federal and state regulations that prohibit discrimination on the basis of disability.

If you are in need of support because of a documented disability (whether it be learning, mobility, mental health, health-related, or sensory) you may be eligible for academic or other accommodations through Disability Resources. See the [Disability Resources webpage](https://inside.sou.edu/dr/index.html) for more information or to schedule an appointment. If you are already working with Disability Resources, make sure to request your accommodations for this course as quickly as possible to ensure that you have the best possible access **since these services are not retroactive.**

All students may benefit from the ability to convert files posted in Moodle to alternate formats including audio, ebook and Braille. [Learn more about file conversion](https://support.sou.edu/kb/articles/students-convert-files-to-other-formats).

## Student Health & Wellness Center (SHWC)

[SHWC](https://health.sou.edu) is an integrative health center that provides both medical and mental health services to students. SHWC is open Monday - Friday 8am-5pm (Wednesdays 9am-5pm). Students can call (541) 552-6136 to schedule an appointment or go to their health portal at <https://health.sou.edu/> to schedule an appointment online. Students can be seen the same day if they have an urgent need. They can call or walk-in to be seen that day. SHWC also offers 24/7 free, confidential mental health and well-being support through the TELUS program. Students can go to [the TELUS home page](https://www.myssp.app/us/home) to talk or chat with a provider.

## Statement on Military and Other Forms of Active Service Duty

Pursuant to Oregon law, any student enrolled at a public university who is a member of the military, state National Guard, or other federal or state service protected by ORS 352.293 who is ordered to active duty for more than 30 consecutive days has the right to request accommodation for such service, subject to the conditions and requirements of applicable Oregon law or regulation. Such accommodations may include, but are not limited to, the right to withdraw from a course without penalty, a grade of Incomplete and option to complete at a later date once service has concluded, and/or the right to credit for any tuition and fees already paid, depending on the student's status.

Any student enrolled at a public university who is a member of the military, state National Guard, or other federal or state service protected by ORS 352.293 who is ordered to active duty for fewer than 30 consecutive days and misses a course session, assignment, examination or other coursework due to serving on active duty or is receiving medical treatment for an injury sustained on active duty has the right to request accommodation for their service or medical treatment, subject to the conditions and requirements of applicable Oregon law or regulation. Such accommodations may include, but are not limited to, the right to submit any missed examination, assignment or other course requirement upon completion of service or treatment; and/or the right to have a course grade assigned without submitting missed assignment or examinations, should the instructor determine that sufficient work has been assessed for the determination of a grade. Any student who expects to be called for active duty should contact instructors as soon as possible to discuss accommodations.

## Attendance and Financial Aid

Students who receive federal financial aid are required to attend and participate in all of the courses for which they register, starting with the first week of class. For face-to-face courses, in-person attendance is necessary. The US Department of Education (USDE) describes the following activities as indicators of attendance and active participation (see the [formal rules](https://www.federalregister.gov/documents/2020/09/02/2020-18636/distance-education-and-innovation) at the USDE website):

* Attending a synchronous class, lecture, recitation, or field or laboratory activity where there is an opportunity for interaction between the instructor and students;
* Submitting an assignment;
* Taking an assessment or an exam;
* Participating in an interactive tutorial or webinar;
* Participating in an assigned study group, group project or an online discussion; or
* Interacting with an instructor about academic matters.

The following activities are not considered by the USDE to be indicators of first-week engagement:

* Living in campus housing or using an institutional meal plan,
* Logging into an online class or tutorial without any further participation, or
* Participating in academic counseling or advising.

Instructors will report students who are absent during the first week of an in-person course or those who do not participate in an online course as described above. Any students who are reported as no-shows will have their financial aid status reviewed and their award may be adjusted as a result.

## Syllabus Statement on AI

**Use only with prior permission and with citation and acknowledgement**

Students are not allowed to use artificial intelligence such as ChatGPT as a source or tool, unless instructor permission is obtained in advance, along with an appropriate citation as a source and/or acknowledgement as a tool as established in the discipline ([APA](https://apastyle.apa.org/blog/how-to-cite-chatgpt)).