

ARIZONA STATE UNIVERSITY

SWU 321/394 Statistics for Social Workers SYLLABUS SPRING 2024 | SESSION C (iCourse # 25655)

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I. SWU 321: Statistics for Social Workers

SWU 321 is for undergraduates; SWU 394 is for graduate students taking the course as a pre-requisite for the MSW program. Those enrolled in 321 will receive a letter grade. Those enrolled in 394 will receive a Pass/Fail grade (C and better will earn a passing grade).

- II. Program Level: BSW
- III. Course Requirements: Credit: 3 Credits Elective or Required: Required

IV. Land Acknowledgement

Arizona State University acknowledges, with respect, that its physical locations are within the ancestral homelands of those Native American tribes that have sustained connections to its lands and waters since time immemorial, including the Akimel O'odham (Pima), Pee Posh (Maricopa), Quechan (Yuma), and Tohono O'odham peoples.

V. Statement on Inclusion

Arizona State University is deeply committed to positioning itself as one of the great new universities by seeking to build excellence, enhance access and have an impact on our community, state, nation and the world. To do that requires our faculty and staff to reflect the intellectual, ethnic and cultural diversity of our nation and world so that our students learn from the broadest perspectives, and we engage in the advancement of knowledge with the most inclusive understanding possible of the issues we are addressing through our scholarly activities. We recognize that race and gender historically have been markers of diversity in institutions of higher education. However, at ASU, we believe that diversity includes additional categories such as socioeconomic background, religion, sexual orientation, gender identity, age, disability, veteran status, nationality and intellectual perspective.

VI. Course Description

This class is intended for pre-social work and social work majors who have not been exposed to statistical analysis. The course is designed to help social work students appreciate, interpret, use, and integrate statistics within the practice of social work.

VII. Rationale for the Course

Effective and competent social work practice requires an understanding of statistical

analysis. Statistical literacy is crucial to a social work practitioner's ability to inform and guide practice decisions. Unless one can determine if a statistical analysis was performed correctly, one cannot know whether the findings of a research study have credibility or to what degree recommendations derived from the study should be implemented in one's own practice. In addition, a social work practitioner must be able to communicate knowledge generated from their own research.

VIII. Course Competencies

Council on Social Work Education's 2015 Educational Policy and Accreditation Standards (EPAS): <u>https://www.cswe.org/getattachment/Accreditation/Standards-and-Policies/2015-EPAS/2015EPASandGlossary.pdf</u>

Competency 1: Demonstrate Ethical and Professional Behavior

Social workers understand the value base of the profession and its ethical standards, as well as relevant laws and regulations that may impact practice at the micro, mezzo, and macro levels. Social workers understand frameworks of ethical decision-making and how to apply principles of critical thinking to those frameworks in practice, research, and policy arenas. Social workers recognize personal values and the distinction between personal and professional values. They also understand how their personal experiences and affective reactions influence their professional judgment and behavior. Social workers understand the profession. Social Workers also understand the roles and responsibilities of the profession. Social Workers also understand the role of other professions when engaged in inter-professional teams. Social workers recognize the importance of life-long learning and are committed to continually updating their skills to ensure they are relevant and effective. Social workers also understand emerging forms of technology and the ethical use of technology in social work practice.

Practice Behavior	Dimensions Measured in Course	Operationalized
Distinguish, appraise, and integrate multiple sources of knowledge, including research-based knowledge, and practice wisdom	Knowledge Values Skills Cognitive and Affective Processes	 Read (especially as they appear in research publications) and use basic descriptive, univariate, and bivariate statistical procedures. Develop an appreciation for social statistics and the capacity to see its relevance to other knowledge areas: practice, behavior, and policy.
		 Describe how to employ statistical tools to learn about the characteristics and experiences of groups in our society that have not been as visible as other groups.
		 Discuss how to use measures of central tendency and variability to describe differences and similarities among social groups.
	ge Diversity and Differen	ce in Practice

Social workers understand how diversity and difference characterize and shape the human experience and are critical to the formation of identity. The dimensions of diversity are understood as the intersectionality of multiple factors including but not

limited to age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status. Social workers understand that, as a consequence of difference, a person's life experiences may include oppression, poverty, marginalization, and alienation as well as privilege, power, and acclaim. Social workers also understand the forms and mechanisms of oppression and discrimination and recognize the extent to which a culture's structures and values, including social, economic, political, and cultural exclusions, may oppress, marginalize, alienate, or create privilege and power.

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Practice Behavior	Dimensions Measured in Course	Operationalized
Generate research questions that are	Knowledge Values	 Develop research questions that are appropriate for diverse populations.
appropriate for diverse populations, and address personal	Skills Cognitive and Affective Processes	 Understand demographic factors' impacts on a statistical relationship.
biases by using statistics		 Understand the attributes of different factors.

Competency 3: Advance Human Rights and Social, Economic, and Environmental Justice

Social workers understand that every person regardless of position in society has fundamental human rights such as freedom, safety, privacy, an adequate standard of living, health care, and education. Social workers understand the global interconnections of oppression and human rights violations, and are knowledgeable about theories of human need and social justice and strategies to promote social and economic justice and human rights. Social workers understand strategies designed to eliminate oppressive structural barriers to ensure that social goods, rights, and responsibilities are distributed equitably and that civil, political, environmental, economic, social, and cultural human rights are protected.

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Practice Behavior	Dimensions Measured in Course	Operationalized
Develop research	Knowledge	Provide examples or develop research
questions and	Values	questions to advance human rights and
examples to advance	Skills	social, economic, and environmental
human rights and	Cognitive and	justice when examining statistical
social, economic, and	Affective Processes	relationships.
environmental justice		

Competency 4: Engage in Practice-Informed Research and Research-Informed Practice

Social workers understand quantitative and qualitative research methods and their respective roles in advancing a science of social work and in evaluating their practice. Social workers know the principles of logic, scientific inquiry, and culturally informed and ethical approaches to building knowledge. Social workers understand that evidence that informs practice derives from multi-disciplinary sources and multiple ways of knowing. They also understand the processes for translating research findings into effective practice.

Practice Behavior	Dimensions Measured in Course	Operationalized
Use research	Knowledge	Develop an appreciation for social
evidence to inform	Values	statistics and the capacity to see its
practice	Skills	relevance to other knowledge areas:
		practice, behavior, and policy.

	Cognitive and	
	Affective Processes	
Competency 7: Asses	s Individuals, Families, (Groups, Organizations, and Communities
Social workers understand that assessment is an ongoing component of the dynamic and interactive process of social work practice with, and on behalf of, diverse individuals, families, groups, organizations, and communities. Social workers understand theories of human behavior and the social environment, and critically evaluate and apply this knowledge in the assessment of diverse clients and constituencies, including individuals, families, groups, organizations, and communities. Social workers understand methods of assessment with diverse clients and constituencies to advance practice effectiveness. Social workers recognize the implications of the larger practice context in the assessment process and value the importance of inter-professional collaboration in this process. Social workers understand how their personal experiences and affective reactions may affect their assessment and decision-making.		
Practice Behavior Dimensions Measured in Course Operationalized		
Collect, organize,	Knowledge	1) Appropriately select and correctly use
and interpret client	Values	basic statistical procedures,
data	Skills	particularly those necessary for

Affective Processes	 Communicate statistical results and interpretations in terms that are meaningful to other social work practitioners.
	3) Interpret a computer-generated print- out of statistical procedures

practice evaluation.

Cognitive and

Competency 9: Evaluate Practice with Individuals, Families, Groups, Organizations, and Communities

Social workers understand that evaluation is an ongoing component of the dynamic and interactive process of social work practice with, and on behalf of, diverse individuals, families, groups, organizations and communities. Social workers recognize the importance of evaluating processes and outcomes to advance practice, policy, and service delivery effectiveness. Social workers understand theories of human behavior and the social environment, and critically evaluate and apply this knowledge in evaluating outcomes. Social workers understand qualitative and quantitative methods for evaluating outcomes and practice effectiveness.

Practice Behavior	Dimensions Measured in Course	Operationalized
Collect, organize, and interpret client data.	Knowledge Values Skills Cognitive and Affective Processes	Appropriately select and correctly use basic statistical procedures, particularly those necessary for practice evaluation.

Competency 10: Demonstrate working knowledge of the social, political, and cultural diversity of the Southwest and apply that expertise across all practice levels and locations.

Social Workers in the Southwest develop and apply practical, in-depth knowledge of the cultural, historical, and contextual factors that impact services, populations, and practices. Aligned with the mission of the School of Social Work, social workers trained at ASU understand the intersection of federal, state, international, and tribal governing

systems, cultural strengths and barriers to services, and policies and programs that impact service populations and practitioners. Social workers in the Southwest and across the nation understand the significance and complexity of the U.S.-Mexico transborder region; enduring principles of tribal sovereignty and the federal trust relationship with indigenous peoples; and the challenges facing children, youth and families in the social, economic, and political context. Social workers in the Southwest and across the nation understand the social dynamics of human migration and settlement that require responsiveness to Latinx; African American, older adult, recently relocated, immigrant, refugee, and urban American Indian/Alaska Native populations.

Practice Behavior	Dimensions Measured in Course	Operationalized
Understand statistical examples that are in the context of the Southwest.	Knowledge Values Skills Cognitive and Affective Processes	Understand and interpret the statistical relationships in the context of the Southwest.

IX. Course Units

- 1. Intro to statistics
- 2. Univariate Statistics
- 3. Bivariate and multivariate statistics

X. Key Course Concepts

ANOVA Chi Square Correlation Coefficient Descriptive Statistics Hypothesis Inferential Statistics Level of Measurement Level of Significance Nonparametric Statistics Null Hypothesis Parametric Statistics Pearson r Regression Analysis t-test Type I Error Type II Error

XI. ASU and Related Professional Policies

Students are responsible for reviewing and complying with all ASU policies, including the following:

Academic Integrity Policy:

https://provost.asu.edu/academic-integrity

Academic dishonesty or "cheating" will result in an E in the course and referral to the Standards Committee for social work students and to your home department for students from other majors. Cheating includes working with others to complete quizzes and other assignments, plagiarizing from the textbook, lectures, or websites; getting answers from someone or websites; and sharing assignment information with others. Aiding anyone in this process will also result in a referral to the standards/ethics committee of your discipline.

Review this <u>tutorial on Academic Integrity</u>. Anyone in violation of these policies is subject to sanctions.

Avoiding Plagiarism

Some students may not understand what plagiarism is, and therefore plagiarize unwittingly or unintentionally. But ignorance is not an excuse for unethical academic conduct. To avoid plagiarism, review this <u>tutorial on Plagiarism Awareness</u> and this <u>reference on</u> <u>Avoiding Plagiarism</u>. Moreover, read the following rules that apply regardless of the citation form or style you may be using:

- 1. <u>Direct Quotations</u> Whenever you directly quote someone else, you must provide a citation to the source of the material from which you are quoting. Moreover, you must put the material in quotation marks or otherwise set it off in an indented quote so the reader knows what words are yours and what words are quoted. It is unacceptable to use the words of others and only partially quote the original source. This is true even if you provide citation to the source both in text and in your references section!
- 2. <u>Paraphrasing/Indirect Quotations</u> Whenever you indirectly quote someone else (i.e., you paraphrase the work of another), you must provide a citation to the source of the material from which you are paraphrasing. Simply changing the structure of a sentence, or a few words in a sentence so that the sentence you write is not an exact quote from the original source does not mean a citation is not needed. This is because the idea you are expressing is not your own, but rather someone else's.
- 3. <u>Using Other's Ideas</u> Even if you compose an entire paragraph of writing in your own words (i.e., neither quoted nor paraphrased), if the idea you are expressing in that paragraph is not your own, original idea, you must provide a citation to the source from which you obtained this idea.
- 4. <u>Collaborative Work</u> If you collaborate on any work with someone else and fail to acknowledge that collaboration, you are guilty of plagiarism. If you have received permission from your professor to collaborate on some assignment, be sure that all of the contributors' names appear on the submission.
- 5. <u>Altering or Revising Another's Work</u> If you alter or revise the work done by someone and submit that work as your own, you have plagiarized. Similarly, if you allow someone else to alter or revise work that you have done and then allow that person to submit it as his or her own work, you are both guilty of plagiarism. Work that is not entirely your own must be credited by citation, both in text and in your references list.
- 6. <u>Altering or Revising Your Own Prior Work</u> You should also be aware that reusing or revising your own work that was prepared for another class or another professor, and not bringing it to the attention of the professor to whom you are submitting the revised work is also academic dishonesty. If, for example, you have two classes that require a term paper, and you can write one paper that meets the requirements of both classes, you may not submit that paper to both professors unless you get permission to do so in advance from both professors. Similarly, if you wrote a paper several semesters ago that can be revised and submitted in satisfaction of a paper requirement for a course in which you are currently enrolled, doing so is academic dishonesty unless you get the advanced permission of your professor to do so. The reason this is dishonest is that it is not an original work prepared in satisfaction for the requirements on the course you are currently taking. Contact your instructor for written approval if you are seeking an exception for unique cases.

Student Code of Conduct:

https://eoss.asu.edu/dos/srr/codeofconduct

Computer, Internet, and Electronic Communications Policy:

https://www.asu.edu/aad/manuals/acd/acd125.html

Missed Classes Due to University Sanctioned Activities:

http://www.asu.edu/aad/manuals/acd/acd304-02.html

Accommodations for Religious Practices:

http://www.asu.edu/aad/manuals/acd/acd304-04.html

Commercial Note Taking Services:

http://www.asu.edu/aad/manuals/acd/acd304-06.html

All course content, including lectures, are copyrighted materials that students may not share outside of the course, upload, sell, or distribute. This includes recordings or notes taken during the conduct of the course (see ACD 304–06, "Commercial Note Taking Services" for more information). This course may cover sensitive material that some students may find difficult and/or offensive. To promote open and thorough discussion and create an environment in which all can participate within the bounds of courtesy and respect, including those with whom you may disagree, you are asked to not record class sessions (with the exception of those who may need ADA accommodation), and to not distribute or post recordings or verbatim accounts of your classmates' comments.

Handling Disruptive, Threatening, or Violent Individuals on Campus:

http://www.asu.edu/aad/manuals/ssm/ssm104-02.html

Title IX:

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at https://sexualviolenceprevention.asu.edu/faqs As a mandated reporter, your professor is obligated to report any information they become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, https://eoss.asu.edu/counseling, is available if you wish to discuss any concerns confidentially and privately.

For an online tool that is designed to help students who may be experiencing dating violence evaluate their safety, make decisions, and connect to campus and community services, visit: <u>www.myplanapp.org</u>. myPlan is available for students of all gender identities and sexual orientations. This tool is also for friends who want to support someone they are concerned may be in an abusive relationship.

National Association of Social Workers Code of Ethics:

The National Association of Social Workers (NASW) Code of Ethics is a guide to the everyday conduct of professional social workers. Sections are: 1) The Preamble, which summarizes the social work profession's mission and values; 2) The Purpose, which is an overview of the Code's main functions and a brief guide for dealing with ethical dilemmas; 3) Ethical principles, which set forth ideals that all social workers should aspire to based on social work's core values of service, social justice, dignity and worth of a person, importance of human relationships, integrity, and competence; and 4) Ethical standards to guide social workers' conduct.

Please review at:

https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-Spanish

XII. Accessibility Statement

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act as amended (ADAAA) of 2008, professional disability specialists and support staff at the <u>Student Accessibility and Inclusive Learning Services (SAILS)</u> facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities. SAILS staff coordinate transition from high schools and community colleges, in-service training for faculty and staff, resolution of accessibility issues, community outreach, and collaboration between all ASU campuses regarding disability policies, procedures, and accommodations.

Establishing Eligibility for Disability Accommodations

Qualified students with disabilities may be eligible to receive academic support services and accommodations. Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are <u>responsible for requesting accommodations and</u> <u>providing qualifying documentation</u> to the Student Accessibility and Inclusive Learning Services (SAILS).

Every effort is made to provide reasonable accommodations for qualified students with disabilities. Prior to receiving any disability accommodations, verification of eligibility from the SAILS is required. Once registered with the SAILS, students with disabilities must meet with the instructor to discuss what reasonable accommodations they will need to be successful in this course. Students with disabilities that are known at the time this course begins are encouraged to make your request for accommodations at the beginning of the semester, either during office hours or by appointment. For disabilities that arise after the course has begun, students should meet with the instructor at the earliest possible time to arrange accommodations for their learning needs. Disability information is confidential.

Qualified students who wish to request an accommodation for a disability should contact SAILS by going to <u>https://eoss.asu.edu/accessibility</u>, calling (480) 965-1234 or emailing <u>student.accessibility@asu.edu</u>. To speak with a specific office, please use the following information:

ASU Online and Downtown Phoenix Campus	Polytechnic Campus
University Center Building, Suite 160	480-727-1165 (Voice)
602-496-4321 (Voice)	
West Campus	Tempe Campus
University Center Building (UCB), Room 130	480-965-1234 (Voice)

XIII. Health Insurance Portability and Accountability Act (HIPAA) Policy Statement

Even as students, social workers are subject to HIPAA regulations that protect client health information. To comply with these regulations, any client information you present from your internship or work must be de-identified. Any information that would allow someone to determine the client's identify must be changed or eliminated. This includes obvious information like names and birthdates. Other information so unique to the person that it will allow for identification may include such variables as diagnosis, race/ethnicity, gender, sexual orientation, and place of residence.

XIV. Professional Conduct and Civility in the Classroom

Professional conduct is expected in the classroom setting. That is, students should arrive on time for class, be prepared to participate in the class discussion, and show respect for one another's opinions. College courses bring together a group of diverse individuals with various backgrounds. Students are influenced and shaped by such factors as ethnicity, gender, sex, physical abilities, religious and political beliefs, national origins, and sexual orientations, among others. We expect to learn from each other in an atmosphere of positive engagement and mutual respect. This course may deal with complex and controversial issues that often feel challenging and uncomfortable. We will be exposed to diverse ideas and opinions, and sometimes we will not agree with the ideas expressed by others. Nevertheless, students must engage with one another with civility, respect, and professionalism. Students are asked to carefully evaluate their own thinking about violence against women, including their biases, work experiences, and understandings.

Required behavior standards are listed in the <u>Student Code of Conduct and Student</u> <u>Disciplinary Procedures</u>, <u>Computer</u>, <u>Internet</u>, <u>and Electronic Communications policy</u>, and outlined by the <u>Office of Student Rights & Responsibilities</u>. In addition,

- <u>Students are entitled to receive instruction free from interference</u> by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per <u>Instructor Withdrawal of a Student for</u> <u>Disruptive Classroom Behavior</u>.
- Although you are welcome to disagree with the professor or your classmates, everyone is expected to participate respectfully. Students who engage in personal attacks; who use rude, insulting, or disrespectful language; or who engage in other disruptive or threatening behavior may face disciplinary action. An instructor may withdraw a student from a course with a mark of 'W' or 'E' when the student's behavior disrupts the educational process. In addition, students may face formal disciplinary action in the Office of Student Judicial Affairs. For more details about the University's Student Code of Conduct, please visit the following link and read the Arizona Board of Regents Policy Manual Sections 5-301 to 5-404, the terms of which are hereby incorporated by reference into this syllabus: https://www.azregents.edu/board-committees/policy-manual
- Appropriate online behavior (also known as netiquette) is defined by the instructor and

includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor.

The Office of Student Rights and Responsibilities accepts <u>incident reports</u> from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

XV. Self-Care, Unanticipated Distress and Counseling Services

Throughout the learning that occurs in this course, students are asked to continually and carefully evaluate their own thoughts and feelings, be mindful of their reactions to the material, and practice self-care as needed. Given the nature of the material presented, the emotional content may be difficult. Students may experience unexpected and/or distressing responses to course content and discussions. Please communicate with your professor if you need support around distress arising from course content. Please also be aware that ASU offers counseling services for enrolled students. For more information, please go to the ASU Counseling Services website: https://eoss.asu.edu/counseling or call (480) 965-6146, Monday – Friday 8am – 5pm. After business hours, call the EMPACT ASU-dedicated hotline at (480) 921-1006. Student Advocacy and Assistance in the Dean of Students office guides students in resolving educational, personal and other difficulties by linking students with appropriate university and community resources

XVI. Faculty as Mandated Reporters

Course faculty are mandated reporters; therefore, anything communicated in class or in a course assignment or assessment that raises concern about safety and/or well-being of a student or another individual or group may be cause for intervention and communication with other university staff and community officials.

XVII. Pronouns

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities, and all humans have the right to be addressed in accordance with their personal identity. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise the instructor of your preference early in the semester.

COURSE OUTLINE

XVIII.Text Book and Required Readings

Weinbach, R. W., & Grinnell, R. M. (2015 — 9th edition). *Statistics for Social Workers*. Boston, MA: Pearson, Allyn & Bacon.

This textbook will be provisioned as an e-book and made available at a discounted price significantly cheaper than if purchased directly from the publisher. If you wish to take advantage of this discounted group price, no additional action is needed. Following the drop/add period, a charge of \$35.00, plus tax, will post to your student account under the header "Bkstr Publisher Negotiated Rate" and your access will continue uninterrupted.

If you'd rather purchase the material from an alternate source, you may choose to opt out of the program by using this link (campus specific):

Tempe/Online:https://includedcp.follett.com/1230Poly:https://includedcp.follett.com/1232West:https://includedcp.follett.com/1233Downtown:https://includedcp.follett.com/1234

Enter your ASU e-mail address AS IT APPEARS IN THE ASU DIRECTORY (<u>http://asu.edu/directory</u>), then follow the instructions provided. Be aware that if you optout, your access to the e-book will be discontinued.

TO ACCESS THE E-BOOK, CLICK ON THE BRYTEWAVE TOOL IN YOUR COURSE'S CANVAS WEBSITE. Please note: the eBook won't appear on your shelf until approximately 5 days prior to the start of classes. If you need assistance accessing the book or the opt-out portal, fill out the support request form: https://forms.gle/uD4GhBxMoixnbwYx5

Lectures and other readings and materials will be available on the course CANVAS website.

Торіс	Activities (See Canvas Modules for Learning Objectives)	Assignments (due by 11:59PM on due date)			
Week 1 (Jan. 8	Week 1 (Jan. 8 – 14)				
Module 1 Introduction to Class	 Required Reading: Read the Syllabus Read the ASU Policies listed in the Syllabus under "Academic Integrity." Read Chapter 1 in the textbook, pages 1-7 	DUE SUNDAY, 1/14/2024 1. Syllabus Quiz 2. Intro Discussion Board			
Week 2 (Jan. 1	5 – 21)				
Module 2 Introduction to Statistics and Level of Measurement	 Required Reading: Read Chapter 1 in the textbook, pages 7-22. Read the Module 2 Lecture slides Watch Level of Measurement video 	 DUE THURSDAY, 1/18/2024 1. Independent-Dependent Variable and Level of Measurement worksheet DUE SUNDAY, 1/21/2024 2. Module 2 Quiz 			
Week 3 (Jan. 22 – 28)					
Module 3 Frequency Distributions and Graphs	 Required Reading: Read Chapter 2 in the textbook Read Module 3 Lecture Watch video 	DUE SUNDAY, 1/28/2024 1. Module 3 Quiz			

XIX. Course Schedule

Торіс	Activities (See Canvas Modules for	Assignments
Topic	Learning Objectives)	(due by 11:59PM on due date)
Week 4 (Jan 29		
Module 4 Measures of Central Tendency and Variability	 Required Reading Read Chapter 3 in the textbook Read Module 4 Lecture Watch video on measures of central tendency and variability Watch video on outliers 	 DUE THURSDAY, 2/1/2024 1. Discussion Board – Level of measurement and central tendency (Initial post) DUE SUNDAY, 2/4/2024 2. Discussion Board – Level of measurement and central tendency (<u>Response post</u>)
Week 5 (Feb 5	-	
	 Required Reading: Review (or complete if necessary) the required readings and materials from last week 	DUE SUNDAY, 2/11/2024 1. Module 4 Quiz
Week 6 (Feb 12	2 – 18)	
Module 5 Normal Distribution	 Required Reading: Read Chapter 4 in the textbook Read Module 5 Lecture Watch video on normal distribution Watch video on Z-scores 	 DUE THURSDAY, 2/15/2024 2. Normal distribution worksheet DUE SUNDAY, 2/18/2024 3. Module 5 Quiz
Week 7 (Feb 19		
Module 6 Testing Hypotheses	 Required Reading: Read Chapter 5 in the textbook Read/watch Module 6 Lecture 	 DUE THURSDAY, 2/22/2024 1. Hypothesis Testing worksheet DUE SUNDAY, 2/25/2024 2. Module 6 Quiz
Week 8 (Feb 20	6 – Mar 3)	
Module 7 Sampling Distributions	 Required Reading: Read Chapter 6 in the textbook Read Module 7 Lecture Watch video on sampling distribution 	 DUE THURSDAY, 2/29/2024 1. Extra Credit: Research Question worksheet DUE SUNDAY, 3/3/2024 1. Module 7 Quiz
Week 9 (Spring	g Break 3/3 – 3/10)	
Week 10 (Mar 11 – 17)		
Module 8 Cross Tabulation and Chi- Square	 Required Reading: Read Chapter 8 in the textbook Watch Module 8 Lecture Watch video on bivariate analysis Watch video on chi-square test 	 DUE THURSDAY, 3/14/2024 1. Discussion Board – Applying chi square analysis (initial post) DUE SUNDAY, 3/17/2024 2. Discussion Board – Applying chi square analysis (response post) 3. Module 8 Quiz

Торіс	Activities (See Canvas Modules for	Assignments
. opio	Learning Objectives)	(due by 11:59PM on due date)
Week 11 (Mar		
Module 9 t-tests and ANOVA	 Required Reading: Read Chapter 7 in the textbook Read Module 9 Lecture Watch Guest Lecture, Dr. Anthony 	DUE SUNDAY, 3/24/2024 1. Module 9 Quiz
	Watch Guest Lecture, Dr. Williams	
Week 12 (Mar		
	 Required Reading: Review (or complete if necessary) the required readings and materials from last week 	DUE THURSDAY, 3/28/2024 2. t-test Short Essay
Week 13 (Apr	1 – 7)	
Module 10 Correlations Week 14 (Apr	 Required Reading: Review (or complete if necessary) the required readings and 	DUE THURSDAY, 4/4/2024 1. Discussion board, initial post DUE SUNDAY, 4/7/2024 2. Discussion board, response post DUE SUNDAY, 4/14/2024 3. Module 10 Quiz
	materials from last week	
Week 15 (Apr		
Module 11 Regression Analysis	 Required Readings: Read Chapter 10 (pages 215-221 only) Read Module 11 	DUE THURSDAY, 4/18/2024 1. Bivariate Analysis Worksheet
Week 16 (Apr	22 – 28)	
Review & Study, Final Exam	 Required Readings: Review and study Learning Objectives in Modules 2 to 11. 	DUE SUNDAY, 4/28/2024 1. <u>Final Exam</u> 2. Extra Credit Opportunity

XX. Evaluative Procedures

A. ASSIGNMENTS

You will be graded in three areas: 1) Participation (50 points) 2) Quizzes (90 points)

3) Final exam (20 points)

IMPORTANT NOTE: This is <u>not a go-at-your-own pace course</u>. There are hard deadlines for quizzes, participation assignments, and the final exam. I know that situations beyond your control arise from time to time. Please contact me BEFORE the assignment due date.

Depending on your circumstance, you may be granted an extension, but you will only receive partial credit. You will NOT be granted an extension if you contact me AFTER the due date. There are a couple of extra credit opportunities built into the course. It is in your best interest to complete these extra credit opportunities as they become available.

1. Participation (50 Points) [EPAS 2.1.3]

- 1. Syllabus Quiz (4 points)
- 2. <u>Application of Statistics Exercise Worksheets (24 points)</u> [these are similar to quizzes, but do not have a time restriction]
 - i. Independent and Dependent Variable and Level of Measurement (3 points)
 - ii. Normal distribution (4 points)
 - iii. Hypothesis Testing (8 points)
 - iv. Bivariate analysis (9 points)
- 3. t-Test Short Essay (8 points)

Develop a 1-2-page short essay (double spaced, and 12 pt font) to address the following questions:

- 1. When do you use a t-test and when do you use ANOVA? What are the requirements for the independent variables and dependent variables in both procedures (consider the level of measurement for the variables)?
- 2. What are different types of t-tests?
- t-tests are often used in intervention studies to evaluate intervention effects. Describe a research question in your interest area that can be analyzed using a t-test.
 - a. What is your research hypothesis in your example?
 - b. What is the independent variable, and what is the dependent variable in your research question?
 - c. What is the level of measurement for the independent and dependent variables in your research question.
 - d. Which type of t-test would you use for the data analysis and why?
- 4. Discussion Board Postings (14 points)
 - i. Introduce yourself (2 points)
 - ii. Module 4 application of statistics (*instructions below*)
 - Initial post (3 points)
 - Response post (1 point)
 - iii. Module 8 application of statistics (instructions below)
 - Initial post (3 points)
 - Response post (1 points)
 - iv. Module 10 application of statistics (instructions below)
 - Initial post (3 points)
 - Response post (1 point)

<u>For Module 4</u>, propose how you would use one of the **measures of central tendency**. Identify a single variable. Select a variable that is of interest to you based on your discipline.

Do not use any of the examples provided in the book or lectures.

Before you work on this discussion board posting, review the following in the text/lectures: what is a variable; level of measurement, and measures of central tendency.

Address all of the following in your *initial post* (3 points):

- 1. Describe the attributes of the variable (be specific)
- 2. What is the level of measurement for the variable?
- 3. What measure of central tendency is the most appropriate for the variable you selected? (explain why)

Address all of the following in your *response post* (1 point):

Comment on a classmate's proposal. For example, you can suggest another way to measure the variable with different attributes, you can comment on the accuracy of the identified level of measurement or selection of central tendency.

For Module 8, propose how you would use a **chi square analysis** based on your area of interest or discipline.

Do not use any of the examples provided in the textbook or lectures.

Before you work on this discussion board post, review the following in the text/lectures: what is a chi square analysis; what are the variable requirements for chi square analysis; what is a variable and how is it measured; how to structure research questions and hypotheses.

Address all of the following in your *initial post* (3 points):

- 1. Identify the two variables that will be used. Be sure that the level of measurement of your variables is appropriate for a chi square analysis.
- 2. Indicate how the two variables are measured (what are the specific attributes of the variable?).
- 3. Include a research question that reflects the analysis that you are proposing.

Address all of the following in your *response post* (1 points):

Identify a classmate's post that parallels or speaks to your interests. Your response post will include two parts:

Part 1: State why/how this post is related to your interest.

- Part 2: Build upon your classmate's chi square analysis by changing one of the variables in their analysis.
 - a. Identify the variable you are changing and the new variable you will use.
 - b. Indicate how the variable will be measured (what are the specific attributes of the variable?).
 - c. Include a new research question that incorporates the new variable you are using.

<u>For Module 10</u>, propose how you would use a **correlation analysis** based on your area of interest or discipline.

Before you work on this discussion board post, review the following in the textbook/lectures: what is a correlation analysis, what are the variable requirements, level of measurement, how to structure research questions and hypotheses.

Address all of the following in your *initial post* (3 points):

- 1. Identify the two variables that will be used.
- 2. Indicate how the two variables are measured by describing the attributes of each variable.
- 3. Include a research question that reflects the analysis that you are proposing.

Address all of the following in your *response post* (1 point):

Comment on a classmate's proposal. For example, you can suggest an additional variable that might be interesting to examine in the context of the original proposal; you can comment on whether the expected correlation might be positive or negative, or you can comment on the accuracy of the identified level of measurement.

2. Quizzes (90 Points) [EPAS 2.1.3; 2.1.4; 2.1.10b]

There are nine quizzes. Each quiz is worth 10 points. Each quiz will be a blend of multiple-choice and short-answer questions. The quizzes will be randomly generated. There will be a bank of several questions for each learning module, and every student will be randomly assigned questions from the test bank. Theoretically, no two students should have the exact same quiz. Quizzes cannot be re-opened. In other words, once you open the quiz, you have to complete it. The best way to study for any given quiz is to focus on the learning objectives for that module. Read the chapter and lecture prior to initiating the quiz. The questions will be based on the learning objectives.

IMPORTANT NOTE: You will only have 45 minutes to complete each quiz. The quizzes are designed to be completed in 25-30 minutes, so 45 minutes will give you ample time. A point will be deducted for every minute you go over the allotted time.

While taking the quizzes, if your internet connection is dropped or if you have computer problems, you need to contact me immediately. I can reset the quiz for you, but only one time. Please be sure to take your quizzes on a reliable computer, with a reliable internet connection.

3. Final Exam (20 Points) [EPAS 2.1.3; 2.1.4; 2.1.10b]

The final exam will be cumulative. It will be open book, open notes. Each student will be randomly assigned 15 questions (15 points) followed by an essay question (5 points). You may see some questions you previously had on a quiz, and some of the questions you will not have seen before. Keep in mind that some questions may appear similar to a question on a previous quiz, but are in fact different. Once you open the Final Exam you must take it. Final Exam DUE DATE: 4/29/2024 at 11:59PM

You will have 80 minutes to complete the final exam. If you go over time, 1 point will be deducted for every minute. While taking the final exam, if your internet connection is dropped or if you have computer problems, you need to contact me immediately. I can reset the timer, but only one time. Please be sure to take your final exam on a reliable computer with a reliable internet connection.

Any cheating or aiding in this process will result in an E in the course and referral to the Standards Committee.

XI. Grading Guidelines

Points	Grade
156 or more	A+
150-155	А
144-149	A-
140-143	B+
134-139	В
128-133	B-
124-127	C+
112-123	С
97-111	D
96 or below	E

Grading System

An "A+" grade at the undergraduate level means that a student is doing exceptional work. The student attends class regularly (for online students, they frequently check course announcements and/or course messages frequently and reach out to their instructor with any questions or inquiries for points of clarity), completes all of the course assignments, and demonstrates a detailed, comprehensive grasp of the material in the assignments and in class participation. To receive an "A+" grade a student must achieve at the highest level; such grades are rare and may not be given during any one semester.

An "A" grade at the undergraduate level means that a student is doing outstanding or excellent work. The student attends class regularly (for online students, they frequently check course announcements and/or course messages frequently and reach out to their instructor with any questions or inquiries for points of clarity), completes all of the course assignments and demonstrates a thorough grasp of the material through course assignments and in class participation. To receive an "A" grade a student must go well above and beyond the basic expectations for the course.

An "A-" grade at the undergraduate level means that a student is doing excellent work. The student attends class regularly (for online students, they frequently check course announcements and/or course messages frequently and reach out to their instructor with any questions or inquiries for points of clarity), hands in all of the course assignments and in the majority of coursework, demonstrates a thorough grasp of the material. To receive an "A-" grade a student must go above and beyond the basic expectations for the course.

A "B+" grade at the undergraduate level means that a student is doing well above average work. The student attends class regularly (for online students, they frequently check course announcements and/or course messages frequently and reach out to their instructor with any questions or inquiries for points of clarity), completes all of the course assignments and demonstrates a strong grasp of the material.

A "B" grade at the undergraduate level means that a student is doing above average work. The student attends class regularly (for online students, they frequently check course announcements and/or course messages frequently and reach out to their instructor with any questions or inquiries for points of clarity), hands in all of the course assignments and

demonstrates (at the very least) a strong grasp of the material. In most courses, a majority of students would be expected to achieve at this grade level.

A "B-" grade at the undergraduate level means that a student is doing slightly above average work. The student attends class regularly (for online students, they frequently check course announcements and/or course messages frequently and reach out to their instructor with any questions or inquiries for points of clarity), completes all of the course assignments and demonstrates understanding of the material.

A "C+" grade at the undergraduate level means that a student is doing at least satisfactory work, and meeting more than the minimum requirements for the course. The student misses several classes (for online students, they do not frequently check course announcements and/or course messages; students do not reach out to their instructor with any questions or inquiries for points of clarity), does not hand in all of the course assignments, and demonstrates a basic level of understanding of the course concepts.

A "C" grade at the undergraduate level means that a student is doing at least satisfactory work, and meeting the minimum requirements for the course. The student misses several classes regularly (for online students, they do not frequently check course announcements and/or course messages; students do not reach out to their instructor with any questions or inquiries for points of clarity), hands in all of the course assignments, and demonstrates a basic level of understanding of the course concepts.

A "D" or "E" at the undergraduate level means that a student is doing unacceptable work, demonstrating a complete lack of understanding of course concepts.

A "EN" (Failing never participated) grade at the undergraduate level means that a student is failing the course as a result of not participating or turning in assignments

A "EU" (Failing did not complete) grade at the undergraduate level means that a student did some work in the course, but is failing as a result of not completing all of the course assignments

A "I" (Incomplete) grade at the undergraduate level is given by the course instructor when a student is otherwise doing acceptable work but are unable to complete the course because of illness or other conditions beyond their control. Students are required to arrange with the instructor for the completion of the course requirements. The arrangement is recorded on the Request for Grade of Incomplete form. Students do not reregister or pay fees to complete the course. The completion date is determined by the instructor but may not exceed one calendar year from the date the mark of "I" is recorded. When the student completes the course, the instructor must submit an online grade change request. If a student receives an "I" in an undergraduate course the grade will be automatically changed to a failing grade "E" if the student does not complete the course within one calendar year. Marks of "I" are changed to a grade of "E" (0.00) for purposes of evaluating graduation requirements for undergraduate students.

A "NR" (No Report) grade simply means that a grade has not yet been reported. Once final grade processing takes place for the semester, most classes will have an actual grade posted instead of the "NR". If an "NR" grade appears for a course in a prior semester, students should contact the instructor of the course to find out why a final grade was not recorded.

A "W" (Withdrawal) means that a student withdrew from a class after the first week of school; students receive a mark of "W" on their transcript and earn no credit or grade for withdrawn classes.

A "Y" (Satisfactory) grade is generally used as a grade for successfully completed internships, projects, readings and conference, research, seminars, theses, dissertations, and workshops. Students earn hours for a "Y" grade, but the grade is not used for computing their GPA.

A "XE" (Academic Dishonesty) grade denotes failure due to academic dishonesty and is treated the same as an "E" for the purposes of GPA, course repeatability, and academic standing determination. A student may not avoid any penalty for academic dishonesty by withdrawing from a course. A student may be reinstated to a course to receive a penalty of a reduced or failing grade or XE. The grade of XE may only be assigned in accordance with ASU's Student Academic Integrity Policy, and not as part of the normal end of the semester grading process.

Incompletes

You may be granted a grade of incomplete during the last week of the course provided that:

- 1. you remained up-do-date in the course for at least 2/3 of the semester;
- 2. you request an incomplete during the last week of class, before the course end date of 5/4/2024;
- 3. the instructor decides that an incomplete is appropriate under the circumstances;
- 4. you are earning a passing grade in the class; and
- 5. you understand that your grade for the course will be reduced one full letter in exchange for the extra time you are allowed to complete the coursework.

If you receive a grade of incomplete, the deadline for completion of the course is within 4 weeks of 5/4/2024.

XXI. Other Expectations

Participation

It is suggested that you visit the course website at least 3-4 times a week during the semester to watch for new announcements, complete worksheets, discussion board assignments, and other assignments that may arise from student needs or concerns about the content.

You will be graded on your participation. Your participation grade will consist of points you accumulate by posting on specified Discussion Boards, completing worksheets, or other assignments.

Important Note: Whenever there is a question about what assignments are due, please remember this syllabus is considered to be the ruling document. The course syllabus is an educational contract between the instructor and students. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes via email and the course Announcements. Please remember to check

your ASU mail and the course Announcements often.

Classroom Behavior

Appropriate classroom behavior is defined by the instructor. This includes the number and length of individual messages online. Course discussion messages should remain focused on the assigned discussion topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion.

Inappropriate discussion board messages may be deleted if the instructor feels it is necessary. Students will be notified privately that their posting was inappropriate. Student access to the course "Send Email" feature may be limited or removed if the instructor feels that the students are sending inappropriate electronic messages to other students in the course.

XXII. Words of Welcome

Welcome to Statistics for Social Workers. For many of you this is your first online course. Please take the time to read this syllabus very carefully, and read it several times. Utilize the first week of classes to familiarize yourself with the course website. A Student "User Manual" is available online to help you learn how to navigate the course website. You can locate it by clicking on the "Tools" button on the menu on the left hand-side of the course homepage.

Please pay careful attention to deadlines for participation, assignments, quizzes, paper, and the final exam (a class schedule and assignment overview is available on pp. 11-17). I hope you enjoy the class. Do not hesitate to contact me by email if you have any questions or concerns (sabrina.oesterle@asu.edu). When you e-mail me please include "SWU 321" in the subject line.

MOST IMPORTANTLY, remember learning is not a spectator sport. Fundamentally, the *responsibility to learn is yours and yours alone*. For learning to happen in any course, you must take an active role in the process, and that is especially true for an online course. Moreover, it is critical that you read all materials (including book chapters and lectures) and that you ask questions.

Suggestions for tackling the course concepts

#1. **Note the learning objectives** at the beginning of each module. These objectives delineate what you are expected to take away from the module; thus, they are the focus of the weekly assignments. You can treat these objectives as headings in the notes that you take as you work through the textbook chapter and lecture.

#2. **Read the textbook**. The lectures and other course materials assume that you have already read the text. Jumping straight to the lecture will impede your comprehensive understanding of the course concepts. Take notes, especially on the concepts outlined in the learning objectives (see #1).

#3. **Read / listen to the lectures**. Take your time going through the lectures to ensure that you understand the key concepts. Take notes, especially on the concepts outlined in the learning objectives (see #1).

#3.5 If needed, re-read the textbook chapter.

#4. **Think of examples** that are relevant to your area of interest as this will help solidify concepts.

#5. **Review your notes**. If you follow #1-4, you will have a comprehensive set of notes on the key course concepts. And, at the end of the semester, you can use these notes to study for the final exam.

#6. **Use available resources** if you are having trouble. If there are concepts that you are still unclear on, post your question in the "Hallway Conversations" board. You can also talk with me during office hours if you would like further clarification on a concept. If you feel that you would benefit from tutoring, ASU offers **FREE** tutoring services for statistics: <u>https://tutoring.asu.edu/student-services/online-subject-area-tutoring</u>

#7. Once you are comfortable with all of the concepts highlighted in the module's learning objectives, complete the **assignment**.