#### MISSISSIPPI VALLEY STATE UNIVERSITY DEPARTMENT OF SOCIAL WORK FALL 2018-2019 SW 408 Statistics for Social Work

This document does not constitute a contract with the University. It contains guidelines only.

Academic Term and Year:	Fall 2018-2019
Course Prefix and Number:	SW 408-HE 1
Course Title:	Statistics for Social Work
Days, Time and Location of class:	Tuesday/Thursday 2:25-3:40 William Sutton Administration, 202
Professor:	Sowitza Johnson, LMSW
Office Location:	William Sutton Administration, 214
Office Hours:	Monday Tuesday Wednesday Thursday Friday
Office Phone Number:	(662) 254-3867
Main Office Number:	(662) 254-3365
Email Address:	sowitza.johnson@mvsu.edu
Prerequisite:	SW 330
<b>Required Technology Skills:</b>	Basic computer, internet skills and Web 2.0 technologies

# CATALOG COURSE DESCRIPTION

An introduction to basic statistics for application in social work evaluation strategies.

### **COURSE DESCRIPTION**

The purpose of this course is to introduce students to the use of statistical analysis in social work practice. Students will gain insight into how statistics are numerical representations of human behavior and that statistical analysis plays a key role in the development of social work practice and policy knowledge.

#### DEPARTMENT OF SOCIAL WORK/BSW PROGRAM MISSION

The mission of the Department of Social Work at Mississippi Valley State University is to prepare graduates to practice with individuals in need and populations at risk in rural areas. The Bachelor of Social Work (BSW) Program prepares students to apply the knowledge and skills of generalist social work practice with individuals, families, groups, organizations and communities. Through the curriculum, the program instills in students social work knowledge, values, and skills in a manner which enables students to work with diverse populations in a wide range of settings. Concurrently, special emphasis is placed on social work practice with impoverished minorities living in rural regions, such as the Mississippi Delta in which the University is located and committed to serve, as well as rural areas globally.

#### **BSW PROGRAM GOALS**

- 1. Educate students for entry level social work positions for generalist practice with individuals, families, groups, organizations and communities.
- 2. Provide students with the necessary knowledge and skills for working with diverse populations, including oppressed, minority and rural populations.
- 3. Instill in students a professional social work identity which incorporates the values and ethics of the profession.

### **COMPETENCIES**

#### **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's history, its mission, and the roles and responsibilities of the 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.

- Make ethical decisions by applying the standards of the NASW Code of Ethics, relevant laws and regulations, models for ethical decision-making, ethical conduct of research, and additional codes of ethics as appropriate to context.
- Use reflection and self-regulation to manage personal values and maintain professionalism in practice situations.
- Demonstrate professional demeanor in behavior; appearance; and oral, written, and electronic communication.
- Use technology ethically and appropriately to facilitate practice outcomes.
- Use supervision and consultation to guide professional judgment and behavior.

#### **Competency 2: Engage Diversity and Difference 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.

- Apply and communicate understanding of the importance of diversity and difference in shaping life experiences in practice at the micro, mezzo, and macro levels.
- Present themselves as learners and engage clients and constituencies as experts of their own experiences.
- Apply self-awareness and self-regulation to manage the influence of personal biases and values in working with diverse clients and constituencies.

**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.

- Apply their understanding of social, economic, and environmental justice to advocate for human rights at the individual and system levels.
- Engage in practices that advance social, economic, and 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.

- Use practice experience and theory to inform scientific inquiry and research.
- Apply critical thinking to engage in analysis of quantitative and qualitative research methods and research findings.
- Use and translate research evidence to inform and improve practice, policy, and service delivery.

# **Competency 5: Engage in Policy Practice**

Social workers understand that human rights and social justice, as well as social welfare and services, are mediated by policy and its implementation at the federal, state, and local levels. Social workers understand the history and current structures of social policies and services, the role of policy in service delivery, and the role of practice in policy development. Social workers understand their role in policy development and implementation within their practice settings at the micro, mezzo, and macro levels and they actively engage in policy practice to effect change within those settings. Social workers recognize and understand the historical, social, cultural, economic, organizational, environmental, and global influences that affect social policy. They are also knowledgeable about policy formulation, analysis, implementation, and evaluation.

- Identify social policy at the local, state, and federal level that impacts well-being, service delivery, and access to social services.
- Assess how social welfare and economic policies impact the delivery of and access to social services.
- Apply critical thinking to analyze, formulate, and advocate for policies that advance human rights and social, economic, and environmental justice.

# **Competency 6: Engage with Individuals, Families, Groups, Organizations, and Communities**

Social workers understand that engagement 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 value the importance of human relationships. Social workers understand theories of human behavior and the social environment, and critically evaluate and apply this knowledge to facilitate engagement with clients and constituencies, including individuals, families, groups, organizations, and communities. Social workers understand strategies to engage diverse clients and constituencies to advance practice effectiveness. Social workers understand how their personal experiences and affective reactions may impact their ability to effectively engage with diverse clients and constituencies. Social workers value principles of relationship-building and inter-professional collaboration to facilitate engagement with clients, constituencies, and other professionals as appropriate.

- Apply knowledge of human behavior and the social environment, person-inenvironment, and other multidisciplinary theoretical frameworks to engage with clients and constituencies.
- Use empathy, reflection, and interpersonal skills to effectively engage diverse clients and constituencies.

#### **Competency 7: Assess 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.

- Collect and organize data, and apply critical thinking to interpret information from clients and constituencies.
- Apply knowledge of human behavior and the social environment, person-inenvironment, and other multidisciplinary theoretical frameworks in the analysis of assessment data from clients and constituencies.
- Develop mutually agreed-on intervention goals and objectives based on the critical assessment of strengths, needs, and challenges within clients and constituencies.
- Select appropriate intervention strategies based on the assessment, research knowledge, and values and preferences of clients and constituencies.

# **Competency 8: Intervene with Individuals, Families, Groups, Organizations, and Communities**

Social workers understand that intervention 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 are knowledgeable about evidence-informed interventions to achieve the goals of clients and constituencies, including individuals, families, groups, organizations, and communities. Social workers understand theories of human behavior and the social environment, and critically evaluate and apply this knowledge to effectively intervene with clients and constituencies. Social workers understand methods of identifying, analyzing and implementing evidence-informed interventions to achieve client and constituency goals. Social workers value the importance of inter-professional teamwork and communication in interventions, recognizing that beneficial outcomes may require interdisciplinary, inter-professional, and inter-organizational collaboration.

- Critically choose and implement interventions to achieve practice goals and enhance capacities of clients and constituencies.
- Apply knowledge of human behavior and the social environment, person-inenvironment, and other multidisciplinary theoretical frameworks in interventions with clients and constituencies.
- Use inter-professional collaboration as appropriate to achieve beneficial practice outcomes.
- Negotiate, mediate, and advocate with and on behalf of diverse clients and constituencies.
- Facilitate effective transitions and endings that advance mutually agreed-on goals.

# **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.

- Select and use appropriate methods for evaluation of outcomes.
- Apply knowledge of human behavior and the social environment, person-inenvironment, and other multidisciplinary theoretical frameworks in the evaluation of outcomes.
- Critically analyze, monitor, and evaluate intervention and program processes and outcomes.
- Apply evaluation findings to improve practice effectiveness at the micro, mezzo, and macro levels.

**Rural** Competency 10: Use interventions that recognize the needs and strengths present in rural communities.

• Understand and use appropriate interventions needed to address the strengths of individuals, families, groups, and communities in rural.

**Rural** Competency 11: Coordinate interventions with social workers, related professionals, leaders and citizens in rural areas in order to develop resources and programs that enhance services for rural clients.

• Demonstrate knowledge of local resources in rural settings in order to effectively empower children and families to enhance their capacities.

Competencies		Assessment
Competencies Competency 1 Demonstrate Ethical and Professional Behavior	<ul> <li>Make ethical decisions by applying the standards of the NASW Code of Ethics, relevant laws and regulations, models for ethical decision- making, ethical conduct of research, and additional codes of ethics as appropriate to context;</li> <li>Use reflection and self- regulation to manage personal values and maintain professionalism in practice situations.</li> <li>Demonstrate professional demeanor in behavior; appearance; and oral, written, and electronic communication.</li> <li>Use technology ethically and appropriately to</li> </ul>	Class discussion/Exercises Statistical Application

### **COMPETENCIES**

	<ul> <li>facilitate practice outcomes.</li> <li>Use supervision and consultation to guide professional judgment and behavior.</li> </ul>	
Competency 4 Practice-informed Research & Research- informed Practice	<ul> <li>Use practice experience and theory to inform scientific inquiry and research.</li> <li>Apply critical thinking to engage in analysis of quantitative and qualitative research methods and research findings.</li> <li>Use and translate research evidence to inform and improve practice, policy, and service delivery.</li> </ul>	Class discussion/Exercises Statistical Application
Competency 5 Engage in Policy Practice	<ul> <li>Identify social policy at the local, state, and federal level that impacts well-being, service delivery, and access to social services.</li> <li>Assess how social welfare and economic policies impact the delivery of and access to social services.</li> <li>Apply critical thinking to analyze, formulate, and advocate for policies that advance human rights and social, economic, and</li> </ul>	Class discussion/Exercises Statistical Application

	environmental justice.	
<b>Rural Competency 11</b> Coordinate interventions with social workers, related professionals, leaders and citizens in rural areas in order to develop resources and programs that enhance services for rural clients	• Demonstrate knowledge of local resources in rural settings in order to effectively empower children and families to enhance their capacities.	Statistical Application

#### **COURSE REQUIREMENTS**

#### **Required Textbooks:**

Salkind, N. (2017). Statistics for People Who (Think They) Hate Statistics. (6<sup>th</sup> ed.). SAGE Publications, Inc.

#### **Class Attendance Policy:**

Class attendance is required. Students are expected to attend all class sessions. If a class is missed, the student is still responsible for any announcements, handouts, or material presented in class.

#### Policy and Procedure on Cheating and Plagiarism:

#### Philosophy

Honesty and integrity are essential values of Mississippi Valley State University's mission to pursue truth and knowledge. All persons – administrators, faculty, staff, and students – share the responsibility for achieving high standards of excellence. Academic dishonesty of any kind negates this mission and is antithetical to the development of morally and ethically sound human beings. Therefore, Mississippi Valley State University will not tolerate cheating or plagiarism in any form. Cheating and plagiarism compromise the process of fair and equitable evaluation conferred by the University. Students who engage in such activities deny themselves the opportunity to benefit from accurate assessment and feedback and prevent full academic and personal development.

#### Responsibility

Although the faculty of Mississippi Valley State University is responsible for establishing the standards for moral and academic excellence in teaching and learning, these standards can be reached only with the cooperation and support of students. Each student is expected, therefore, to accept responsibility for maintaining honesty and integrity in all endeavors inside and outside the classroom, studio, or laboratory. Faculty encourages ethical behaviors by: establishing an atmosphere of respect in the classroom; stating clearly on the syllabus their standards and expectations for academic performance, structuring learning situations that encourage honesty and deter cheating and plagiarism; and for presenting and enforcing the University's policy on academic dishonesty.

#### Definitions

**Cheating** is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit. Such behavior also includes assisting another student in such practice. Although cheating is often associated with examinations, it is the intent of this definition that the term "cheating" not be limited to examination situations only, but also that it includes any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means.

**Plagiarism** is a specific type of cheating which consist of the misuse of the published and/or unpublished works of others by misrepresenting the intellectual property of others as one's own ideas or works.

#### Academic Sanctions for Cheating or Plagiarism

When a faculty member responsible for a course has reason to believe that an action of a student falls within one or both of the aforementioned definitions, the faculty member should initiate a conference with the student to present the student with the charge and the evidence. If the student admits to the wrong doing, the instructor shall impose an academic sanction. The instructor has the prerogative of lowering the grade, assigning a grade of "0" or "F" for the work submitted, assigning an "F" for the entire course, or recommending another penalty, including dismissal from the University. In the advent that the student does not admit wrong doing or that no mutually agreeable settlement is reached as a result of the faculty-student conference, the faculty member will consult the department chair.

#### **Make-up Examination Policy:**

It is the responsibility of the student to request to make up an examination within one week following the missed examination. The decision rests with the class instructor as to whether a student will be allowed to make up the test. The decision will be based on whether the instructor considers the reason for missing the examination to be justifiable.

#### **Teaching/Learning Strategies:**

Various teaching methods will be used to meet the course objectives and stimulate discussions in the class. Students are expected to participate in discussion and share their thoughts regarding issues being discussed. This class will be formatted in order to accommodate the use of videos, assigned readings and presentations as well as lecturing. guest speakers who are experienced in mental health assessment will present information to help students to understand the progression of mental illness and the cutting edge intervention to help those diagnosed with mental illness to live and maintain a healthier emotional being.

#### **Distance Education Policy:**

In compliance with IHL policy an SACSCOC guidelines, MVSU Department of Social Work requires a minimum of 2250 minutes per three semester hour course, regardless of course delivery method, and may include final examination time. The number of weeks must meet federal financial aid requirements.

Syllabi for courses taught on-line or hybrid (partially on-line) must include outlines, calendars, and/or schedules of activities that demonstrate compliance with the 2250 minute requirement.

Activity	Undergraduate	Graduate
Reading	15 pages per hour	20 pages per hour
Research paper writing	3 hours per page	3 hours per page
Essay writing	1.5 hours per page	1.5 hours per page
Quiz/exam	1 minute per multiple choice	1 minute per multiple choice
	2 minutes per short answer	2 minutes per short answer
Exam study time	4 hours	4 hours
Threaded discussion	120 minutes per thread	120 minutes per thread
Group work	Number of minutes of	Number of minutes of
	interaction among group	interaction among group
	members	members

#### **Department of Social Work Hour Conversion Standards:**

These conversion standards are adopted and set by the Department of Social Work and approved by the Chair. Use of any other standards must be presented to the department and approved by the Chair.

#### **Required Tasks/Activities:**

Students will be expected to develop research questions, hypotheses and methods for studying questions and testing hypotheses. Students will also be expected to complete a statistical application by learning how to utilize library resources to obtain peer reviewed journal articles.

#### **Evaluation Procedures:**

Exams

There will be 3 exams and a final exam valued at 100 points each.

#### **Statistical Application**

Each student will be expected to submit a statistical summary using peer reviewed journal articles for a maximum of 100 points. The guidelines for completing the statistical application will be distributed by the instructor prior to the assignment due date.

#### **Performance Standards:**

Grades will be determined based on the following point values and scale:

Three exams @100 points ea.	300 points
Class Participation	100 points
Statistical Application	100 points
Final exam	100 points
Total Points	600

Α	600-540
B	539-480
С	479-420
D	419-360
F	359-Below

# AMERICANS WITH DISABILITIES ACT: Services for Students with Disabilities (SSD)

Mississippi Valley State University is committed to providing reasonable accommodations for students with a documented disability. If you feel you are eligible to receive accommodations for a covered disability (medical, physical, psychiatric, learning, vision, hearing, etc.) and would like to request it for this course, you must be registered with the Services for Students with Disabilities (SSD) program administered by University College. It is recommended that you visit the Disabilities Office located inside the EMAP Computer Lab in the Technical Education (IT) Building to register for the program at the beginning of each semester. If you are determined to be eligible after your confidential consultation, you will be provided with a Memo of Accommodations that must be submitted to each of your instructors.

For more information or to schedule an appointment, please contact Mr. Billy Benson, Jr. via phone or email at 662-254-3005 or <u>billy.benson@mvsu.edu</u>.

# **COURSE ACTIVITIES**

Overview of Statistics for Social Workers Readings: Salkind, Chapter 1 Statistics or Sadistics	Class discussion Exercises: Students will come to understand how statistics help to inform social work practice.
Readings: Salkind, Chapter 2 Means to an End	Class discussion Exercises: (Descriptive statistics) Computing and understanding averages (measures of central tendency): Calculating the mean, mode and median
Readings: Salkind, Chapter 3 Vive la Difference	Class discussion Exercises: Understanding Variability: Calculating the range, standard deviation and variance
Readings: Salkind, Chapter 4 A Picture Really Is Worth a Thousand Words	Class discussion Exercises: How to create different types of charts.
Readings: Salkind, Chapter 5 Ice Cream and Crime	Class discussion Exercises: What are correlations and how they work
Readings: Salkind, Chapter 6 Just the Truth	Class discussion Exercises: Understanding Reliability and Validity
MIDTERM WEEK MVSU Library Experience	Assessment Exercises: Peer reviewed journal articles critique/online library resources
Readings: Salkind, Chapter 7 Hypotheticals and You	Class discussion Exercises: The importance of null and research hypotheses
Readings: Salkind, Chapter 8 Are Your Curves Normal	Class discussion Exercises: Understanding probability
	Social Workers Readings: Salkind, Chapter 1 Statistics or SadisticsReadings: Salkind, Chapter 2 Means to an EndReadings: Salkind, Chapter 3 Vive la DifferenceReadings: Salkind, Chapter 3 Vive la DifferenceReadings: Salkind, Chapter 4 A Picture Really Is Worth a Thousand WordsReadings: Salkind, Chapter 5 Ice Cream and CrimeReadings: Salkind, Chapter 6 Just the TruthMIDTERM WEEK MVSU Library ExperienceReadings: Salkind, Chapter 7 Hypotheticals and YouReadings: Salkind, Chapter 7 Hypotheticals and You

Week Ten	Readings: Salkind, Chapter 9	Class discussion
10/23-10/25	Significantly Significant	Exercises: (Inferential Statistics)
(160 Minutes)		Understanding the concept of
		significance, importance and
		difference between Type 1 and
		Type II errors
Week Eleven	Readings: Salkind, Chapters	Class discussion
10/30-11/1	10-17	Exercises: How to select the
(160 Minutes)		appropriate statistical test
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Week Twelve	Readings: Salkind, Chapters	Class discussion
11/6-11/8	10-17	Exercises: How to select the
(160 Minutes)		appropriate statistical test
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Week Thirteen	MVSU Library Experience	Exercise: Peer reviewed journal
11/13-11/15		articles critique/online library
(160 Minutes)		resources
Week Fourteen	MVSU Library Experience	Exercise: Peer reviewed journal
11/20-11/22		articles critique/online library
(160 Minutes)		resources
Week Fifteen	Statistical Application	Exercises: Oral Presentations
11/27-11/29	Presentations	
(160 Minutes)		
. ,	Literature Review due	
	(Blackboard)	
Week Sixteen	FINALS WEEK	Review for final exam
12/3-12/7		Assessment
(160 Minutes)		

#### BIBLIOGRAPHY

- Barber, D. (2012). Bayesian Reasoning and Machine Learning. Cambridge University Press.
- Hartshorn, S. (2015). Hypothesis Testing: A Visual Introduction to Statistical Significance. (Kindle ed.).
- Hastie, T., Tibshirani, R. & Friedman, J. (2009). The Element of Statistical Learning: Data Mining, Inference and Prediction. (2<sup>nd</sup> ed.). Springer Science+Business Media New York. New York, NY.
- James, G., Witten, D., Hastie, T. & Tibashirani, R. (2015). An Introduction to Statistical Learning with Applications in R. (6<sup>th</sup> ed., text rev.). Springer Science+Business Media New York. New York, NY.
- Morris, D. (2016). Bayes Theorem Examples: A Beginners Visual Approach to Bayesian Data Analysis. Blue Windmill Media. Canada.
- National Association of Social Workers. (2003). Social work speaks. NASW policy statements, 2003-2006, 6th edition. Washington, DC: NASW Press.
- Salkind, N. (2011). Statistics for People Who (Think They) Hate Statistics. (4<sup>th</sup> ed.). SAGE Publications, Inc.
- Szuchman, L. and Thomlinson, B. (2004). *Writing with style, APA style for social work, 2nd edition.* Belmont, CA: Thomson Brooks/Cole.
- Triola, M. (2014). Elementary Statistics. (12<sup>th</sup> edition). Pearson Higher Education.
- Wheelan, C. (2013). *Naked Statistics: Stripping the Dread from the Data*. (1<sup>st</sup> ed.) W. W. Norton & Company, Inc. New York, NY.

#### Examples of Peer-Reviewed Journals Relevant to Social Work Research

Child Welfare Child Abuse and Neglect Child and Adolescent Social Work Journal Families in Society The Gerontologist The Journal of Gerontological Social Work Journal of Marriage and the Family Journal of Social Service Research Journal of Social Service Research Journal of Social Work Education Research on Social Work Education Research on Social Work Practice Social Work Social Work in Health Care Social Service Review Social Work with Groups