



This course supports the assessment for BEC1. The course covers 4 competencies and represents 3 competency units.

Introduction

Overview

Statistics in healthcare are far from “just numbers”—they result from valued research and are used to guide everyday decisions for the healthcare team. Every healthcare team member must possess a basic knowledge of this relationship and the main components of statistical analysis. No matter what your role in healthcare is, it is important that you understand how healthcare statistics are calculated, why they are collected, and how they are used in the healthcare setting. This course highlights the role and influence of research and statistics in healthcare and provides explanations and examples of the main components of statistical analysis.

Competencies

This course provides guidance to help you demonstrate the following 4 competencies:

- **Competency 749.1.1: Obtaining and Understanding Data**
The graduate determines how study design affects the type of conclusions that can be drawn using evidence-based practice guidelines.
- **Competency 749.1.2: Probability and the Normal Probability Distributions**
The graduate applies the standard normal distribution to find probabilities and solve problems.
- **Competency 749.1.3: Hypothesis Testing and Significance Levels**
The graduate writes and tests hypothesis using appropriate hypotheses type (i.e., null or alternative).
- **Competency 749.1.4: Correlation Coefficients and Linear Regression**
The graduate evaluates the relationship between variables for linearity and strength using correlation and regression.

Nursing Dispositions Statement

Please review the [Statement of Nursing Dispositions](#).

Course Mentor Assistance

As you prepare to successfully demonstrate competency in this subject, remember that course mentors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course mentors are excited to hear from you and eager to work with you.

Successful students report that working with a course mentor is the key to their success. Course mentors are able to share tips on approaches, tools, and skills that can help you apply the content you're studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don't work out on your first try, course mentors act as a support system to guide you through the revision process. You should expect to work with course mentors for the duration of your coursework, so you are welcome to contact them



as soon as you begin. Course mentors are fully committed to your success!

Preparing for Success

The information in this section is provided to detail the resources available for you to use as you complete this course.

Learning Resources

The learning resources listed in this section are required to complete the activities in this course. For many resources, WGU has provided automatic access through the course. However, you may need to manually enroll in or independently acquire other resources. Read the full instructions provided to ensure that you have access to all of your resources in a timely manner.

Automatically Enrolled Learning Resources

You will be automatically enrolled at the activity level for the following learning resources. Simply click on the links provided in the activities to access the learning materials.

VitalSource E-Texts

The following textbook is available to you as an e-text within this course. You will be directly linked to the specific readings required within the activities that follow.

- Plichta, S.B. and Kelvin, E. (2013). *Munro's statistical methods for health care research* (6th Edition). Philadelphia: Lippincott Williams and Wilkins – WoltersKluwer Health. ISBN: 9781451115611

Note: This e-text is available to you as part of your program tuition and fees, but you may purchase a hard copy at your own expense through a retailer of your choice. If you choose to do so, please use the ISBN listed to ensure that you receive the correct edition.

Other Learning Resources

You will use the following learning resources for this course.

WGU Library E-Reserves

This course utilizes resources located in the WGU Library E-Reserves, with articles available for you to download. For instructions on how to access WGU Library E-Reserves, see the "[Accessing WGU Library E-Reserves](#)" page.

The following e-reserve materials will be used in this course:

- Guiliano, K. (2008). Interpretation and use of statistics in nursing research. *AACN Advanced Critical Care*, 19(2), 211–222.

Nursing Standards

You will be able to access Nursing Professional Standards as they apply to your program through the WGU Library. Please access these documents at the following website:

- [WGU Library Nursing E-Reserves](#)



Additional Preparation

There are many different learning tools available to you within your course of study in addition to the learning resources already discussed. Take the time to familiarize yourself with them and determine how best to fit them into your learning process.

Message Boards, FAQs, Note-Taking Tool

Message boards, FAQs, and a note-taking tool are available in every course of study.

Use the "[Additional Learning Tools](#)" page to review these tools.

The WGU Central Library

The [WGU Central Library](#) is available online to WGU students 24 hours a day. The library offers access to a number of resources, including over 60,000 full-text e-books; articles from journals, magazines, and newspapers; course e-reserves; and tutorials on how to use these resources and the library. The library also includes a reference service for help with research questions or navigating the library.

For more information about using the WGU Library, view the "WGU Library: Finding Articles, Books & E-Reserves" video in the Student Resources section of [The WGU Channel](#).

Center for Writing Excellence: The WGU Writing Center

If you need help with any part of the writing or revision process, contact the Center for Writing Excellence (CWE). Whatever your needs—writing anxiety, grammar, general college writing concerns, or even ESL language-related writing issues—the CWE is available to help you. The CWE offers personalized individual sessions and weekly group webinars. For an appointment, please e-mail writingcenter@wgu.edu.

Course Mentor Assistance

Course mentors are available to help you. Their job is to aid understanding in areas where you need to improve and to guide you to learning resources. Request their help as needed when preparing for assessments.

Course mentors cannot provide reviews of entire assessments. If you fail assessment attempts, review the provided feedback first, then ask the course mentor specific questions about what you can do to meet the competency standard. Request course mentor assistance as necessary in preparing for second attempts at objective assessments or performance task revisions.

Mentors cannot guarantee you pass as they do not evaluate assessments; however, they can provide the assistance and advice necessary to help you succeed.

Nursing Standards

You will be able to access Nursing Professional Standards as they apply to your program through the WGU Library. Please access these documents at the following website:

- [Nursing Standards E-Reserves](#)

Obtaining and Understanding Data



In this section, you will learn about the role and influence of research in healthcare and the most common symbols, data, values, and statistics present in research articles. You will become familiar with the format and key elements of research articles by identifying the main components in various peer-reviewed research articles. You will also be introduced to various visual presentations of data so you can begin to understand how to interpret these types of graphs and charts.

Using Research and Statistics in Health Care

This topic addresses the following learning objectives:

- Explain the role of research in developing knowledge for use in health care evidence-based practice situations.
- Identify several ways that research can influence healthcare policy.
- Identify peer-reviewed healthcare research articles.
- Differentiate between descriptive and inferential research questions in a peer-reviewed article on healthcare research.
- Identify the problem statement/purpose/aim in a peer-reviewed article on healthcare research.
- Identify the theoretical or conceptual framework used in a peer-reviewed article on healthcare research.
- Differentiate between Anderson's model of health care use and the Theory of Planned Behavior.
- Identify the research question(s) in a peer-reviewed article on healthcare research.
- Differentiate between descriptive and inferential questions in a peer-reviewed article on healthcare research.
- Identify the hypothesis being tested in a peer-reviewed article on healthcare research.
- Identify and describe the variables present in a peer-reviewed article on healthcare research.
- Differentiate between observational and quasi-experimental/experimental study designs in peer-reviewed articles on healthcare research.
- Determine the type of sample used in a peer-reviewed article on healthcare research.
- Identify the assumptions and limitations of findings in a peer-reviewed article on healthcare research.

This topic addresses the following competency:

- **Competency 749.1.1: Obtaining and Understanding Data**

The graduate determines how study design affects the type of conclusions that can be drawn using evidence-based practice guidelines.

Relationship of Statistics to Research

Read the following article in the WGU Library E-Reserves for an introduction to nursing research:

- Guiliano, K. (2008). Interpretation and use of statistics in nursing research. *AACN Advanced Critical Care*, 19(2), 211–222.



Read the following articles for an explanation of the terminology used:

- [Demystifying nursing research terminology: Part 1](#)
- [Demystifying nursing research terminology: Part 2](#)

Using Research and Statistics in Healthcare

Please note that *Munro's Statistical Methods for Healthcare Research* includes instructions and review activities for SPSS, which is a powerful tool for statistical analysis. For the purposes of this course, you will not be required to learn about or use SPSS. Please skim the sections that teach how to use this tool and skip the review activities that require it, as indicated in the activity instructions throughout this study plan.

Read the following section in *Munro's Statistical Methods for Healthcare Research*:

- [chapter 1 \("Using Research and Statistics in Healthcare"\)](#)

Evidenced-Based Practice and Research

Explain the role of research in developing knowledge for use in health care evidence-based practice situations.

Read about the methods used by the CDC to collect their health statistics and the impact of these data:

- [CDC Health Statistics: How Do We Know That?](#)
- [CDC Impact of NCHS Data](#)

Explore the CDC Wonder website, which offers a vast amount of statistical information on various health topics.

- [CDC Wonder](#)

Also explore the World Health Organization website, which offers numerous healthcare statistics.

- [World Health Organization](#)

Problem Statement and the Purpose of Research

You must be logged in to the WGU portal to view these articles. Read through both and find the problem statement or purpose of the research in each of these peer-reviewed articles:

- [Nursing Overtime: Why, How Much, and Under What Working Conditions?](#)
- [Concept Analysis: Nurse-to-Nurse Lateral Violence](#)

Framework

You must be logged in to the WGU portal to view this article. Read through the peer-reviewed article and identify the theoretical or conceptual framework:



- [Defining an Evidence-Based Work Environment for Nursing in the USA](#)

Research Questions

You must be logged in to the WGU portal to view this article. Read through the peer-reviewed article and identify the research question:

- [Consequences of Clinical Situations that Cause Critical Care Nurses to Experience Moral Distress](#)

Descriptive and Inferential Questions

You must be logged in to the WGU portal to view this article. Read through the peer-reviewed article, identify the research questions, and determine whether each question is descriptive or inferential:

- [The Effect of a Peer-Mentoring Strategy on Student Nurse Stress Reduction in Clinical Practice](#)

Hypothesis

You must be logged in to the WGU portal to view this article. Read through the peer-reviewed article and identify the hypothesis being tested:

- [Novice Nurse Productivity Following Workplace Bullying](#)

Variables

You must be logged in to the WGU portal to view this article. Look at Table 1 (page 851) and Table 3 (page 853) and determine what types of variables (dependent or independent) are present:

- [Frequency and Burden With Ethical Conflicts and Burnout in Nurses](#)

Study Design

You must be logged in to the WGU portal to view these articles. Read through both peer-reviewed articles and determine whether they exhibit observational or quasi-experimental/experimental study designs:

- [Concept Analysis: Nurse-to-Nurse Lateral Violence](#)
- [Comparison of Communication Outcomes in Traditional Versus Simulation Strategies in Nursing and Medical Students](#)

Sample

You must be logged in to the WGU portal to view these articles. Read through both and identify the sample used in each of these peer-reviewed articles:

- [Napping During Night Shift: Practices, Preferences, and Perceptions of Critical Care and Emergency Department Nurses](#)
- [Defining an Evidence-Based Work Environment for Nursing in the USA](#)



Assumptions and Limitations

You must be logged in to the WGU portal to view this article. Read through the peer-reviewed article and identify the assumptions and limitations:

- [Frequency and Burden With Ethical Conflicts and Burnout in Nurses](#)

Resources for Peer-Reviewed Articles

Peer review is an important part of research and publication. It involves verifying information and addressing conflicting viewpoints before articles are published.

To search for peer reviewed journal articles in the [WGU Library](#) follow these steps:

1. Click the library link located on the “resources” tab.
2. From the library homepage click “federated database search.”
3. **Click the “Health Professions Databases.”**
4. Place a checkmark next to “health professions databases”, and **scroll back to the top and click the "Continue" button.**
5. This will redirect you to the EBSCO search screen. In the “search options” area, scroll to "Limit Your Results" and check the box labeled “peer reviewed”.
6. Perform a search on a topic of your choosing. You can access the full text of articles by clicking on the “PDF full text” link.

Review

Complete the following in *Munro’s Statistical Methods for Healthcare Research*:

- Critical Thinking Concept Review on page 16 of [chapter 1 \(“Using Research and Statistics in Healthcare”\)](#)

Skip the Computational Problems in this chapter.

Check your answers from the review against the answers given on page 465. If you have missed questions from the chapter review, reread the chapter, articles, and web pages covered in this topic.

Organizing, Displaying, and Describing Data

This topic addresses the following learning objectives:

- Explain the nature, purpose, and types of statistics available for analyzing healthcare-related data.
- Define mathematical symbols commonly used in healthcare statistics.



- Differentiate between ordinal, nominal, interval and ratio scales in healthcare statistics.
- Identify the fundamental principles of data handling in healthcare research.
- Interpret frequency tables, bar charts, histograms, stem-and-leaf plots, frequency polygons, and cumulative frequency polygons in healthcare statistics.
- Describe variables in healthcare-related research using appropriate measures of central tendency, dispersion, shape, and skewness.
- Explain the proper use of percentiles in healthcare research.

This topic addresses the following competency:

- **Competency 749.1.1: Obtaining and Understanding Data**

The graduate determines how study design affects the type of conclusions that can be drawn using evidence-based practice guidelines.

Organizing, Displaying, and Describing Data

Read the following section in *Munro's Statistical Methods for Healthcare Research*:

- [chapter 2 \("Organizing, Displaying, and Describing Data"\)](#)

Types of Data

Explore the CDC's National Center for Health Statistics websites to look at the data they have collected on a variety of topics.

- [CDC Fast Facts](#)

As you explore the site, determine whether the data is displayed using ordinal, nominal, interval, and ratio scales, and interpret the findings displayed in the tables, graphs, and other images.

Calculation Skills

You must be logged in to the WGU portal to view this article. Read through the article to learn about epidemiological measures:

- [Calculation Skills for Nurses: Epidemiological Measures](#)

Types of Charts and Graphs

Read the article on this site about different types of charts and graphs:

- [Using Charts and Graphs for Content](#)

Creating Tables and Charts

Work through the tutorials related to the version of Microsoft Office you use:

- [Use Excel tables to manage information](#)
- [How to create a basic chart in Excel 2010](#)
- [How to create a table in Microsoft Excel 2007](#)
- [Charts I: How to create a chart in Excel 2007](#)



Practice creating tables and charts on your computer.

How to Create a Frequency Distribution Chart in Excel

Watch the following video:

- [How to Create a Frequency Distribution Chart in Excel](#)

Microsoft Excel?Summarizing Data with Percentiles and Rank

Watch the following video:

- [Microsoft Excel—Summarizing Data With Percentiles and Rank](#)

Excel for Statistics 2?Central Tendency

Watch the following video:

- [Excel for Statistics 2—Central Tendency](#)

Review

Complete the following in *Munro's Statistical Methods for Healthcare Research*:

- Multiple-Choice Concept Review and Choosing the Correct Measurement Scale questions on pages 55–57 of [chapter 2 \(“Organizing, Displaying, and Describing Data”\)](#).

Also complete Computational Problem #3 on pages 58–59 using a spreadsheet program. Skip the other Computational Problems in this chapter.

Check your answers from the review against the answers given on pages 465–466. If you have missed questions from the chapter review, reread the chapter, article, and web pages covered in this topic.

Probability and the Normal Probability Distributions

Much of statistical analysis is directly related to probability and what is called the “normal distribution curve,” so it is important that you learn about the distinguishing characteristics of probability and normal probability distributions. As you study the content in this section, you will also learn about the conclusions that can be drawn from cross-tabulation tables.

Probability and the Normal Distribution

This topic addresses the following learning objectives:

- Discuss the importance of probability theory for statistical inference in healthcare statistics.



- Identify the characteristics of a probability measure in healthcare statistics.
- Explain the difference between a theoretical probability distribution and an empirical probability distribution in healthcare statistics.
- Compute marginal, joint, and conditional probabilities from a cross-tabulation table in healthcare statistics.
- Interpret the meaning of marginal, joint, and conditional probabilities from a cross-tabulation table in healthcare statistics.
- Define and derive sensitivity, specificity, predictive value, and efficiency from a cross-tabulation table in healthcare statistics.
- Identify and describe the characteristics of a normal distribution in healthcare statistics.
- Use a standard normal distribution to obtain z-scores and percentiles in healthcare statistics.
- Explain the importance of the central limit theorem in healthcare statistics.

This topic addresses the following competency:

- **Competency 749.1.2: Probability and the Normal Probability Distributions**
The graduate applies the standard normal distribution to find probabilities and solve problems.

Probability and the Normal Distribution

Read the following section in *Munro's Statistical Methods for Healthcare Research*:

- [chapter 3 \("Key Principles Underlying Statistical Inference: Probability and the Normal Distribution"\)](#)

Then watch the following videos, which explain these concepts again in very understandable terms:

- [The Normal Distribution](#)
- [Creating z-Scores](#)
- [The Central Limit Theorem, Part 1 of 2](#)
- [The Central Limit Theorem, Part 2 of 2](#)

Applications of Probability and the Normal Distribution

You must be logged in to the WGU portal to view these articles. Read through both to learn how probability and the normal distribution apply to these real-world situations:

- [Does Increasing Education Increase the Probability of a Promotion?](#)
- [Obesity in America](#)

Graphing Average and Standard Deviation in Excel

Watch the following video:

- [Graphing Average and Standard Deviation in Excel 2010](#)

Review



Complete the following in *Munro's Statistical Methods for Healthcare Research*:

- Chapter Review (Multiple-Choice Concept Review, Conceptual Questions, and Computational Problems) on pages 72–75 of [chapter 3 \(“Key Principles Underlying Statistical Inference: Probability and the Normal Distribution”\)](#)

Check your answers from the review against the answers given on pages 467–472. If you have missed questions from the chapter review, reread the chapter and articles covered in this topic, and watch the probability and normal distribution videos again.

Hypothesis Testing and Significance Levels

You have probably had some experience with hypotheses in previous science courses, and hypothesis testing is a crucial part of healthcare research. This section contains information on testable hypotheses, null hypotheses, extrapolated interpretations of values, correlation coefficients, and linear regression.

Hypothesis Testing and Inferential Statistics

This topic addresses the following learning objectives:

- Determine the characteristics of a testable hypothesis in healthcare research.
- Explain the difference between the null and alternative hypotheses in a peer-reviewed article on healthcare research.
- Define statistical significance and explain the meaning of a p-value in a peer-reviewed article on healthcare research.
- Discriminate between type I and type II errors in a peer-reviewed article on healthcare research.
- Recognize the importance of statistical power in conducting analyses in a peer-reviewed article on healthcare research.
- Interpret the rejection region for one- and two-tailed tests and assess the significance of a statistical test in a peer-reviewed article on healthcare research.
- Compare a sample mean with a population mean using a one-sample z-test, for a peer-reviewed article on healthcare research.

This topic addresses the following competency:

- **Competency 749.1.3: Hypothesis Testing and Significance Levels**
The graduate writes and tests hypothesis using appropriate hypotheses type (i.e., null or alternative).

Measuring the Differences Between the Means of Two Unrelated Groups

Read the following section in *Munro's Statistical Methods for Healthcare Research*:

- [chapter 4 \(“Hypothesis Testing with Inferential Statistics”\)](#)

Hypothesis

A hypothesis is often the beginning of good research, and how the hypothesis is treated has a



large impact on the rest of a study, including the results. Read these articles to learn more about the importance and treatment of hypotheses in nursing research:

- [The Use and Abuse of Hypothesis Tests](#)
- [Nursing's Ways of Knowing and Dual Process Theories of Cognition](#)
- [The Null Hypothesis: A Reply](#)
- [Medical Futility: Response to Critiques](#)

Excel Techniques

Watch these videos to learn more about how you can use Excel for statistics:

- [t-Tests, Introduction and One Sample](#)
- [t-Test—Two Sample](#)
- [Correlation Coefficient](#)

Review

Complete the following in *Munro's Statistical Methods for Healthcare Research*:

- Chapter Review (Multiple-Choice Concept Review, Critical Thinking Concept Review, and Computational Problems) on pages 88–90 of [chapter 4 \(“The Independent t Test and the Mann-Whitney U-Test: Measuring the Differences Between the Means of Two Unrelated Groups”\)](#)

Check your answers from the review against the answers given on pages 472–473. If you have missed questions from the chapter review, reread the chapter covered in this topic, and watch the hypothesis videos again.

Correlation Coefficients and Linear Regression

The final section in this course focuses on correlation coefficients and linear regression, and on the application of these principles in healthcare research.

Correlation Coefficients

This topic addresses the following learning objectives:

- Explain when to use correlational techniques to answer research questions or test hypotheses in healthcare research.
- Determine whether to use the Pearson or the Spearman correlation coefficients in healthcare research.
- Compute the Pearson and the Spearman correlation coefficients and determine whether they are statistically significant in a peer-reviewed article on healthcare research.
- Compute the Pearson and the Spearman correlation coefficients and correctly interpret the output in a peer-reviewed article on healthcare research.
- Explain a correlation coefficient in terms of the direction and strength of association and its statistical significance in a peer-reviewed article on healthcare research.
- Identify contexts when it is appropriate to use multiple correlation, partial correlation, and semi-partial correlation in a peer-reviewed article on healthcare research.



This topic addresses the following competency:

- **Competency 749.1.4: Correlation Coefficients and Linear Regression**

The graduate evaluates the relationship between variables for linearity and strength using correlation and regression.

Correlation Coefficients

Read the following section in *Munro's Statistical Methods for Healthcare Research*:

- [chapter 11 \("Correlation Coefficients: Measuring the Association of Two Variables"\)](#)

Correlations in Statistical Analysis

The following videos give detailed, clear explanations of the different types of correlations used in statistics and ways to calculate them:

- [Pearson Correlation](#)
- [Spearman Correlation](#)
- [Correlation Coefficients](#)
- [Partial Correlation, Part 1](#)
- [Semi-partial Correlation, Part 1](#)

Correlations in the Real World

Correlation is a concept that is integral to many research studies. Read these articles to learn more about the significance of correlation in nursing research:

- [Association Between C-Reactive Protein, Carotid Intima-Media Thickness and P-Wave Dispersion in Obese Premenopausal Women](#)
- [Pilot Trial of Spirometer Games for Airway Clearance Practice in Cystic Fibrosis](#)

Review

Complete the following in *Munro's Statistical Methods for Healthcare Research*:

- Chapter Review (Multiple-Choice Concept Review, Choosing the Best Statistical Test, Critical Thinking Concept Review, and Computational Problems) on pages 282–288 of [chapter 11 \("Correlation Coefficients: Measuring the Association of Two Variables"\)](#)

Instead of using SPSS for the Computational Problems in this chapter, you can use a spreadsheet.

Check your answers from the review against the answers given on pages 493–494. If you have missed questions from the chapter review, reread the chapter and articles covered in this topic, and watch the correlation videos again.

Linear Regression

This topic addresses the following learning objectives:



- Determine when it is appropriate to use linear regression with healthcare statistics.
- Solve a prediction equation.
- Explain the difference between testing the significance of R² and the significance of a regression coefficient (beta) in healthcare statistics.
- Identify methods for selecting variables for entry into a linear regression model in healthcare statistics.
- Describe testing regression assumptions in a peer-reviewed article on healthcare research.

This topic addresses the following competency:

- **Competency 749.1.4: Correlation Coefficients and Linear Regression**
The graduate evaluates the relationship between variables for linearity and strength using correlation and regression.

Linear Regression

Read the following section in *Munro's Statistical Methods for Healthcare Research*:

- [chapter 14 \("Linear Regression"\)](#)

Explanations of Linear Regression

The following videos give a detailed, clear explanation of linear regression:

- [Linear Regression, Part 1](#)
- [Linear Regression, Part 2](#)

Linear Regression in the Nursing Research

Read these articles to learn more about how linear regression is used in nursing research:

- [Quantifying the relative importance of predictors in multiple linear regression analyses for public health studies](#)
- [Maternal Cadmium Exposure During Pregnancy and Size at Birth: A Prospective Cohort Study](#)

Review

Complete the following in *Munro's Statistical Methods for Healthcare Research*:

- Multiple-Choice Concept Review, Choosing the Best Statistical Test, and Critical Thinking Concept Review on pages 367–370 of [chapter 14 \("Linear Regression"\)](#)

Also complete Computational Problem #1 on pages 58–59 using a spreadsheet program. Skip the other Computational Problems in this chapter.

Check your answers from the review against the answers given on pages 499–500. If you have missed questions from the chapter review, reread the chapter and articles covered in this topic, and watch the linear regression videos again.



Final Steps

Congratulations on completing the activities in this course! This course has prepared you to complete the assessment associated with this course. If you have not already been directed to complete the assessment, schedule and complete your assessment now.

The WGU Library

The WGU Library

The [WGU Library](#) is available online to WGU students 24 hours a day.

For more information about using the WGU Library, view the following videos on [The WGU Channel](#):

Introducing the WGU library

Note: To download this video, right-click the following link and choose "Save as...": [download video](#).

Searching the WGU library

Note: To download this video, right-click the following link and choose "Save as...": [download video](#).

Center for Writing Excellence: The WGU Writing Center

If you need help with any part of the writing or revision process, contact the Center for Writing Excellence (CWE). Whatever your needs—writing anxiety, grammar, general college writing concerns, or even ESL language-related writing issues—the CWE is available to help you. The CWE offers personalized individual sessions and weekly group webinars. For an appointment, please e-mail writingcenter@wgu.edu.

Feedback

WGU values your input! If you have comments, concerns, or suggestions for improvement of this course, please submit your feedback using the following form:

- [Course Feedback](#)

Accessibility Policy

Western Governors University recognizes and fulfills its obligations under the Americans with Disabilities Act of 1990 (ADA), the Rehabilitation Act of 1973 and similar state laws. Western Governors University is committed to provide reasonable accommodation(s) to qualified



disabled learners in University programs and activities as is required by applicable law(s). The Office of Student Accessibility Services serves as the principal point of contact for students seeking accommodations and can be contacted at ADASupport@wgu.edu. Further information on WGU's Accessibility policy and process can be viewed in the student handbook at the following link:

- [Policies and Procedures for Students with Disabilities](#)