

Walters State Community College Course Syllabus

Course Information

Course Number and Name: HIMT 2309 Data Analysis and Statistics Section ID: 80509.202380 Semester and Year: Fall 2023 Credit Hours: 3 Start Date: August 21, 2023 End Date: December 08, 2023 Course Format: WEB - Web Classes Catalog Course Description: This course instructs students in health data collection, commonly used healthcare statistical computations and interpretation, presentation and reporting of data, indices, databases and registries along with statistics computed for daily operations of the health information management department. This course also includes basic research principles along with purpose of Institutional Review Board and its role in research. Prerequisite or Corequisite Course(s) : HIMT 1301, HIMT 1401 F

Meeting Details: TBD Course Drop Deadline: October 27, 2023

Instructor Information

Name: Gail Winkler, MHIIM, RHIA
Office Location: TECH 118A (Morristown Campus)
Office Hours: Office Hours available by appointment Monday - Thursday
Office Phone: 423-585-6990
Email: Gail.Winkler@ws.edu
Supervisor Name: Sheila Williams, PhD, APN-BC, RN-BC, Interim Dean Health Programs
Supervisor Phone: 423-585-6981
Secretary Phone: 423-585-6981

Required Textbook(s) and Materials

Calculating and Reporting Healthcare Statistics Authors: Susan White, PhD, RHIA, CHDA Publisher: AHIMA Press Edition: 6th Edition

Supplemental or Optional Materials

Microphone is needed on computer to put voice on PowerPoint presentation for project. Calculator can be used when taking tests in this course.

Prerequisite Knowledge/Competencies required for course

Students must be able to create Microsoft Word documents and/or save word files to Rich Text Format (RTF); be able to create Excel spreadsheets and use formulas in Excel; be able to create a PowerPoint presentation; and use Internet and computer to navigate course content.

Student Learning Outcomes/Objectives

Course Outcomes Upon successful completion of this course, students will be able to:

- 1. Utilize basic descriptive, institutional, healthcare statistics, and HIM department statistics.
- 2. Apply graphical tools for data presentations.
- 3. Identify and understand secondary data sources.
- 4. Explain data analytics and decision support.
- 5. Explain common research methodologies used in healthcare.

Course Objectives

Upon successful completion of this course, students will be able to:

- 1. Apply graphical tools for data presentations with a minimum score of 75 on Project 2 Abstract Project.
- Identify and use secondary data presentations with a minimum score of 75 on Projects
 Validate Data and 4 Analyze Data; and correctly answered test questions First 50
 Point Test and Final Exam.
- 3. Validate the reliability and use secondary data with a minimum score of 75 on Project 3 Validate Data.
- 4. Explain analytics and decision support by correctly answered test questions on First 50 Point Test.
- 5. Calculate (utilize) basic descriptive, institutional, and healthcare statistics by correctly answered tests questions on all tests and final exam; and with a minimum score of 75 on Project 1 Excel Statistical Project and Project 2 Abstract Project.
- 6. Analyze data to identify trends with a minimum score of 75 on Project 4 Analyze Data.
- 7. Explain common research methodologies and why they are useful in healthcare by correctly answering test questions on Final exam.
- Calculate and report staffing levels and productivity standards for health information functions by correctly answering test questions on Third 50 Point Test; and completing and discussing Chapter 9 Review – Question 1.
- Apply information and data strategies in support of information governance initiatives with a minimum score of 75 on Project 1 Excel Statistical Project, Project 2 Abstract Project, and Project 4 Analyze Data Project; and, correctly answer tests questions on First 50 Point Test and Final Exam.

AHIMA Entry Level Competencies for Health Information Management (HIM) Associate Degree Level

- Domain I.3. Identify policies and strategies to achieve data integrity. (Bloom's Level 3)
- Domain III.3. Calculate statistics for health care operations. (Bloom's Level 3)
- Domain III.4. Report health care data through graphical presentations. (Bloom's Level 3)
- Domain III.5. Describe research methodologies used in health care. (Bloom's Level 2)

Instructional Approach and Methods

Instructional and Evaluation Methods:

- 1. Discussion
- 2. Projects
- 3. Homework
- 4. Tests

Assessment, Evaluation and Testing Procedures

Testing Procedures:

1. Online (Note: Syllabus indicates tests are worth 50 points. Some tests may create the opportunity to earn additional points on the test and be worth more than 50 points.

Assessment of Points by Type

Type of Assessment	Number	Value	Possible Points
Discussions	13	11.54	150
Projects	4	100	400
Tests	3	50	150
Final Exam	1	100	100
Total Points			800

Grading Scale

A	736 - 800 points
В	680 - 735 points
С	600 - 679 points
D	560 - 599 points
F	559 points or less

Assignments

Class Schedule

Module/Week	Assignment: Calculating and Reporting Healthcare Statistics
8/21/23 - 8/24/23	Orientation Review Syllabus and Class Schedule
8/25/23 - 9/01/23	Module 1 Introduction to Health Statistics Appendix A - An Introduction to Data Analytics Module 1 Discussion
9/02/23 - 9/08/23	Module 2 Mathematics Review Module 2 Discussion
9/09/23 - 9/15/23	Module 3 Patient Census Data Module 3 Discussion
9/16/23 - 9/22/23	Module 4 Inpatient Bed Occupancy Module 4 Discussion First 50 Point Test
9/23/23 - 9/29/23	Module 5 Length of Stay Module 5 Discussion Project 1
9/30/23 - 10/06/23	Module 6 Death (Mortality) Rates Module 6 Discussion
10/09/23 - 10/10/23	Fall Break - No Class
10/11/23 - 10/20/23	Module 7 Hospital Autopsies and Autopsy Rates Module 7 Discussion Second 50 Point Test
10/21/23 - 10/27/23	Module 8 Morbidity and Other Miscellaneous Rates Module 8 Discussion Project 2
10/28/23 - 11/03/23	Module 9 Statistics Computed within the Health Information Management Department Module 9 Discussion

11/04/23 - 11/10/23	Module 10 Descriptive Statistics in Healthcare Module 10 Discussion Third 50 Point Test
11/11/23 - 11/17/23	Module 11 Presentation of Data Module 11 Discussion Project 3
11/18/23 - 11/24/23	Module 12 Basic Research Principles Module 12 Discussion Project 4
11/25/23 - 12/01/23	Module 13 Inferential Statistics in Healthcare Module 13 Discussion
12/04/23 - 12/06/23	Final Exam

Class Participation

Class Participation:

- Quizzes/Tests/Homework due on the due date
- Due date is date quiz/test/homework is listed on class schedule
- Assignments, reading and study activities must be completed to prepare you to take quizzes and tests
- Remember to click "save" for each question when taking a quiz or test
- Tests/quizzes will not be reset for you because you forgot to save answers
- Quizzes and exams marked as practice do not count toward final grade but are available all semester long for unlimited number of attempts to help you study.
- Orientation Quiz and Orientation homework do not count toward grade.
- Emails should always include a subject line. Use correct grammar and punctuation and spelling in emails just as you would in a letter or memo. Use standard fonts that are easy to read. These rules apply to the discussion function as well.
- Students will be notified of any necessary changes to the course syllabus or class schedule by email in elearn for the course. <u>Students are responsible for reading emails in a timely manner.</u>

Punctuality:

Being punctual and attending class in an online environment is just as important as being punctual and attending class in person. Online absences will hurt your grade just as an absence for a physical class will hurt your grade.

- Quizzes/Tests students have 7 calendar days from the due date to complete a quiz or test if not completed on the due date (If quiz or test is not completed within that time period, student will receive a score of zero (0) for that quiz or test.)
- Homework student have until 11:59 pm the next class date after an assignment is due to submit homework if not submitted on the due date or receive a zero (0) for the assignment. (This is a much shorter time period than quizzes or tests because you cannot be prepared for quizzes and tests if you have not completed the assignments.)
- Homework assignments are for study to prepare you for your quizzes and tests. Instructor will answer questions and discuss homework with you each week on the discussion board.

Course and Class Policies/Procedures

Other Requirements: Program Specific Policies

<u>Cheating</u> is construed as attempting to deceive or mislead which includes, but is not limited to:

- 1. Utilizing old tests, lab reports, or projects, notes or written papers, etc.
- 2. Copying and pasting someone else's homework into your file and putting your name on their work
- 3. Providing information to a fellow student during an exam
- 4. Procuring information in an unacceptable manner during an exam (crib-sheet, verbal exchange, looking at another person's paper, utilizing headphones, using your textbook when the quiz/test is not an open book test/quiz, etc.)
- 5. Consulting with a classmate or anyone else when taking a computerized test
- 6. Disregarding other specific policies and procedures outlined for a particular class

Online/Web-Enhanced Course Supplementary Information

Virtual Office Hours	Available throughout the day Monday- Thursday. I will respond to emails within 48 hours. If availability changes during the week students will be notified in elearn.
Library Information	Students can access the library online at Walters State Library (open in new window). Online databases, e-books, reference librarian, card catalog, periodicals, and e-resources can all be access through the web site as well as in person.
Technical Support	If you are having problems using the course software please contact your instructor by email or phone.
Web Addresses and Resources	<u>ahima.org (opens in new window)</u> <u>https://my.ahima.org/careermap(opens in new</u> <u>window)</u> <u>thima.org (opens in new window)</u>
Guidelines for Communication: Email and Discussion Postings	Emails should always include a subject line. Use correct grammar and punctuation and spelling in emails just as you would in a letter or memo. Use standard fonts that are easy to read. These rules apply to the discussion function as well.

Additional Course Requirements/Details/Information

Syllabus Changes:

Students will be notified of any necessary changes to the course syllabus or class schedule by email in elearn for the course. <u>Students are responsible for reading emails in a timely manner.</u>

Academic Honesty

Faculty expect all students to refrain from acts of academic misconduct including but not limited to:

- Plagiarism refers to using another person's ideas or writing without giving proper credit to the original source. Indulging in this type of conduct will subject the student to disciplinary sanctions, which may be imposed through the regular institutional procedures of Walters State Community College as outlined in the Student Handbook. Plagiarism will result in a grade of "0" for the paper/exam/presentation. Student Conduct and Disciplinary Sanctions contained in the college Catalog/Student Handbook apply (see policy 04:18:02 Disciplinary Sanctions). Plagiarism includes, but is not limited to the following:
 - a. Using cut/paste tool from original document with no references given.
 - b. Copying another student's work and submitting it as one's own.
 - c. Forging or otherwise altering signatures.
 - d. Giving or falsifying academic documents or materials.
- 2. Cheating construed as attempting to deceive or mislead which includes, but is not limited to the following:
 - a. Utilizing old tests, projects, notes or written papers.
 - b. Providing unauthorized information to a fellow student about exam content.
 - c. Receiving unauthorized aid from any source with quizzes, examinations, or other assignments.
 - d. Seeking information in an unacceptable manner during/preceding an exam or other assigned work (cheat sheet, verbal exchange, looking at another person's paper or electronic device, utilizing headphones, using textbook when the test/quiz is not an open book test/quiz, using textbook test bank etc.).
 - e. Consulting with a classmate or others when taking a computerized test.
 - f. Disregarding other specific policies and procedures outlined for a particular class.
 - g. Utilizing unapproved technology/electronic equipment during testing (i.e.: mobile devices such as cell phones, smart devices, or tablets, etc.).
 - h. Using the same Internet Protocol network address (IP address) as another student for testing without approval from the course faculty.
- 3. The use of any generative artificial intelligence (AI) tool, such as OpenAI's ChatGPT, Google's Bard, or any other pre-trained language model (commonly referred to as "chatbot"), must be cited for any assignment where it has been used and may not be used unless specifically allowed by your instructor. Please see your instructor or the course policies within the syllabus if you have questions.

Student Resources

TUTORING SERVICES

Students in need of tutoring assistance are encouraged to contact the Office of Student Tutoring located as follows:

- Morristown Campus Student Services Building Room L107 (423) 585-6920
- Niswonger Campus GRNV 226 (423) 798-7982
- Sevierville Campus MMH Room 210 (865) 286-2787
- Claiborne Campus Room 123A (423) 851-4761

Specific tutoring assistance in mathematics and writing is available in-person and online as follows:

• Morristown Campus - English Learning Lab - HUM 120 - (423) 585-6970

<u>Walters State English Learning Lab (opens in new window)</u> ws.edu/academics/humanities/writing-lab

• Morristown Campus - Mathematics Lab - MBSS 222 - (423) 585-6872

<u>Walters State Mathematics Learning Lab (opens in new window)</u> ws.edu/academics/mathematics/learning-lab

TECHNOLOGY SUPPORT

Students who need assistance with computing and technology issues should contact the IET Helpdesk by phone at Morristown: (423) 318-2742; Niswonger: (423) 798-8186; or Sevierville: (865) 286-2789 or on-line access.

<u>Walters State Helpdesk (opens in new window)</u> <u>helpdesk.ws.edu</u>

STUDENTS WITH DISABILITIES SUPPORT SERVICES

Students with disabilities must register with Student Support Services each semester in the Student Services Building, Room U134 (phone (423) 585-6892) if they need any special facilities, services, or consideration.

<u>Walters State Student Support Services (opens in new window)</u> ws.edu/student-services/disability/

SUICIDE PREVENTION STATEMENT

Walters State is committed to and cares about all students. Support services are available for any person at Walters State who is experiencing feelings of being overwhelmed, hopelessness, depression, thinking about dying by suicide, or is otherwise in need of assistance. For immediate help, contact the National Suicide Prevention Lifeline by calling or texting 9-8-8 or the Trevor Lifeline at 1-866-488-7386. Veterans may also contact the Veterans Crisis Line at 1-800-273-8255 (press 1) or Text 838255.

Walters State has a relationship in place with the following community agencies to provide services (may include crisis referral services, prevention screenings, etc.):

- Cherokee Health Systems 423-586-5032
- Frontier Health 423-467-3600

College Policies

STUDENTS HANDBOOK AS OFFICIAL GOVERNING DOCUMENT

This class is governed by the policies and procedures stated in the current Walters State Community College Student Handbook. All students attending Walters State Community College, regardless of the time, location, or format of the class, must abide by the rules and regulations outlined in the current Walters State Catalog/Student Handbook and the current Walters State Timetable of Classes.

<u>Walters State Catalog (opens in new window)</u> <u>catalog.ws.edu/</u>

<u>Walters State Timetable of Classes (opens in new window)</u> ws.edu/admissions/registration/

PURPOSE, LIMITATIONS AND MODIFICATION OF SYLLABUS

This syllabus sets forth the expectations for the course content, work, and grading as well as expectations for student performance and conduct. The syllabus does not constitute a contract between the student and the instructor or the College. The information contained here is subject to change at any time. The instructor reserves the right to modify this syllabus at any time with written notification to the students. Though changes are possible, it is expected that the course will be conducted as described in this syllabus for the semester/year specified in the Course Information section of the syllabus. This syllabus is only valid for the semester/year specified and course requirements are not guaranteed for future semesters.

COURSE GROUND RULES

- Students must attend the first day of on-ground class or contact the instructor prior to the first class. Failure to do this may result in being dropped from the class. Excessive absences may substantially lower the course grade.
- Regular class attendance is a student's obligation for any course regardless of format. (See the Walters State Catalog/Student Handbook). If a student misses class, it is his or her responsibility to contact the instructor regarding missed assignments and/or activities and to be prepared for the next class assignment.
- Students enrolled in web courses must follow the course attendance policy defined for online attendance during the first week of class and throughout the term. Failure to do this may result in being dropped from the class during week one OR may result in the accrual of absences which may negatively impact the student's grade in the course.
- Students who have not paid fees on time and/or are not correctly registered for this class and whose names do not appear on official class rolls generated by the Walters State student information system (MyWS) will not be allowed to remain in class or receive credit for this course.
- Electronic devices must not disrupt the instructional process or college-sponsored academic activity. Use of electronic devices is prohibited unless use of the device is relevant to the activity and use is sanctioned by the faculty member in charge. Electronic devices that are not relevant to the activity or sanctioned by the faculty member in charge should be set so that they will not produce an audible sound during classroom instruction or other college-sponsored academic activity.

FINANCIAL AID

Students receiving any type of financial aid or scholarship should contact the Financial Aid Office before making any changes to their schedule. Schedule changes without prior approval may result in loss of award for the current term and future terms.

All forms of student Financial Aid may be jeopardized or lost due to the lack of Satisfactory Academic Progress in one or multiple courses. Lack of Satisfactory Academic Progress may negatively impact a student's degree/certificate completion pace and further jeopardize Financial Aid eligibility.

CANCELLATION OF CLASSES AND ACADEMIC CONTINUITY

For information related to the cancellation of classes due to inclement weather or other events, please check the Senators Emergency Text system or the college's Web site at:

Walters State Homepage (opens in new window) ws.edu/home/ <u>Walters State Facebook page (opens in new window)</u> <u>https://www.facebook.com/WaltersState/</u>

<u>Walters State Twitter page (opens in new window)</u> <u>https://twitter.com/waltersstate</u>

or call the college's student information line, 1-800-225-4770, option 1; the Sevier County Campus, (865) 774-5800, option 7; the Niswonger Campus (423) 798-7940, option 7; or the Claiborne County Campus, 423-636-6200, option 7. Also, please monitor local TV and radio stations for further announcements.

When an event or disaster interrupts the scheduled operations of the college and the ability to proceed with the academic course activities as planned, the college and your instructor may alter the course plan outlined in the syllabus. Should an event occur, students should refer to their course e-Learn pages and/or class materials previously delivered to receive guidance from their instructor. Students should continue to monitor the official college channels of communication listed in the above paragraph. If you would like to sign up for the Senators Emergency Text system, please go to the following Web site:

<u>Senator Emergency Text System (opens in new window)</u> ws.edu/set/

Dual Enrollment students attending on a high school campus should refer to the high school inclement weather cancellations.

LEARNING MANAGEMENT SYSTEM

Brightspace (commonly known as eLearn or D2L) is the college's Learning Management System (LMS).

Brightspace is committed to accessibility by "deliver[ing] a learning experience that meets the needs of all people, regardless of age or ability." <u>Brightspace Accessibility Standard (opens in new window)</u>

Brightspace is also committed to guarding student data and privacy. <u>Brightspace Privacy Policy</u> (opens in new window)