![College of the Mainland logo]

HITT – 1255 & 1355 – 001IN
Healthcare Statistics
Spring 2021
Internet

Instructor Information

Instructor: Kay Frieze, MHA, RHIA

Email address: kfrieze@com.edu

Office phone: 409-933-8414; **cell phone**: 409-789-5113

Office hours and location: Monday 1 to 3; Tuesday 9 to 11;Wednesday's 1 to 3; Thursday 9 to 12 & Friday by appointment.

Office location – TVB-1325.

Communication Policy: The best way to reach me is either through email kfrieze@com.edu and/or through the mail in blackboard. I will respond to emails within two days of receiving them. **However, if you need to contact me immediately please feel free to contact me by calling 409-933-8414 (office) or 409-789-5113 (Cell) or texting me.**

Course Information

Required Textbook: Calculating and Reporting Healthcare Statistics, 6th edition – Author; Susan White, PhD, RHIA, CHDA; AHIMA; ISBN# 978-1-58426-683-9; AHIMA # -AB120718

Health Information Management Case Studies, 1st or 2nd edition; Author Dianna Foley; If you have the 1st edition do not purchase the 2nd edition.

Textbook Purchasing Statement: A student attending College of the Mainland is not under any obligation to purchase a textbook from the college-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Course Description: Principles of healthcare statistics with emphasis in hospital statistics. Skill development in computation and calculation of health data.

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Determination of Course Grade:

Chapter Reviews (25% of final grade)

Chapter Reviews consist of matching, multiple choice questions as well as calculation problems. The number of questions varies from chapter to chapter. **Chapter 11 quiz and Chapter 11 exercises address the following Core Objective: Visual Communication.**

Midterm (30% of final grade)

The midterm consists of multiple choice and calculation problems pertaining to chapters 1-7.

Final (30% of final grade)

The final consists of multiple choice and calculation problems pertaining to chapters 1 -13. Each question or calculation is worth 1 point. **Final address the following Core Objective: Empirical and Quantitative Skills and critical thinking skills**

Attendance/class participation/discusssions (15% of final grade)

Students are expected to login at least 3 times a week and participate in the discussions/Case Studies and EHRgo on blackboard.

Detailed Grading Formula:

Your semester grade will be comprised of the following components and graded per the following grading scale: Furthermore**, in order to pass this class, you must obtain "C" 75 or better**.

Quizzes	25%
Mid-Term	30%
Final	30%
Attendance/Participation	15%

Grading Scale:

90-100   A
80-89   B
75 – 79   C
65 – 74.99   D
64 – Below   F

Notice to Students Regarding Licensing

Effective September 1, 2017, HB 1508 amends the Texas Occupations Code Section 53 that requires education providers to notify potential or enrolled students that a criminal history may make them ineligible for an occupational license upon program completion. The following website provides links to information about the licensing process and requirements (www.ahima.org).

Should you wish to request a review of the impact of criminal history on your potential (RHIT) prior to or during your quest for a degree, you can visit this link and request a "Criminal History Evaluation": (www.ahima.org).

This information is being provided to all persons who apply or enroll in the program, with notice of the requirements as described above, regardless of whether or not the person has been convicted of a criminal offense. Additionally, HB 1508 authorizes licensing agencies to require reimbursements when a student fails to receive the required notice.

Course outline – Tentative

Date	Class #	Topics/Chapters Covered	Assigned Reading	Homework	Activities You will post your activities in Blackboard
1/19 to 1/24	1	No Class on 1/18 MLK Day. Class will begin on the 19th. Welcome, Review Syllabus and Lecture over Chapter 1	Chapter 1 Introduction to Health Statistics - Define Stats - Need to Study Stats - Differentiate between descriptive and inferential stats - Stats in healthcare originate - Users of healthcare statistics	Chapter 1 Matching and Review **Due 1/24.** Located under the learning Module.	Welcome Discussion **due 1/21**
1/25 to 1/31	2	Chapter 2	Chapter 2 Mathematics Review - Explain fractions, quotient, decimal, ration, proportion, rate and percentage - Difference between numerator and denominator - How to round whole numbers and decimals - How to average a group of numbers	Chapter 2 Matching & Review **Due 1/31 .** Located under the learning Module.	Discussion 2: Compare and contrast descriptive and inferential statistics Due 1/28
2/1 to 2/7	3	Lecture over Chapter 3	Chapter 3 Patient Census Data - Define, differentiate and apply the terms inpatient census, daily inpt. Census, inpt service day, total inpt service days and admissions and discharge (A&D) - Differentiate between an interhospital (interfacility) transfer and an intrahospital transfer - Compute daily census and inpt service days using the admission and discharge data provided	Chapter 3 Matching & Review **Due 2/7.** Located under the learning Module.	Discussion 3 Locate Texas's department of health on the Internet and see what types of statistics are available. How can you use the information as a consumer and as a provider of health care. On Blackboard, please post your initial post by Thursday 2/4 and at least one response to a classmate by Saturday 2/6.

			• Compute census and inpt service days with data given for births and transfers • Compute the average daily census for a patient care unit given inpatient service days for any such unit		
2/8 to 2/14	4	Lecture over Chapter 4 Lecture over Chapter 5	Chapter 4 Percentage of Occupancy • Define and differentiate among the terms inpatient bed count, bed complement, total bed count days, newborn bassinet count, bed count days, newborn count days • Identify the beds that are included in a bed count • Compute the bed occupancy percentage for any period given the data representing bed count and inpt service days (adult and children) • Compute bassinet occupancy percentage • Compute the percentage of occupancy for a period when there has been a change in the number of beds during that period • Calculate the bed turnover rate Chapter 5 Length of stay (LOS) • Define LOS and discharge days • Compute LOS for one pt. based on data provided • Compute total LOS for a group • Compute average LOS using the formulas provided • Compute the average LOS for newborns • Describe a leave of absence day and identify when it is used in calculations	Chapter Matching & Review 4 & 5 **Due 2/14 .** Located under the learning Module.	Discussion Chapter 4 - Conduct an internet search for reasons why some facilities would use the bed turnover rate rather than the percentage of occupancy. On Blackboard, please post your initial post by Thursday 2/11 and at least one response to a classmate by Saturday 2/14. Review information at www.ahcpr.gov/data/hcup/ for information about LOS. Type "hospital LOS" in their search field. Read one of the articles. On Blackboard, please post a summary of the article by Thursday 2/11 and at least one response to a classmate by Saturday 2/14.
2/15 to 2/21	5	Lecture over Chapter 6	Chapter 6 Death (Mortality) Rates • Define and calculate the death rates: gross, net, postoperative, anesthesia, maternal, newborn and fetal • Calculate the case fatality rate	Chapter 6 Matching & Review **Due 2/21.** Located under the learning Module.	.

			• Differentiate between operation and procedure • Define Cancer mortality rates		
2/22 to 2/28	6	Chapter 7	Chapter 7 Hospital Autopsies and Autopsy Rates • Define the terms autopsy, hospital inpt autopsy, hospital autopsy and autopsy rate • Define a coroner's case and determine when a coroner's case would be included in a hospital's autopsy rate Compute the following autopsy rates: gross, net, adjusted hospital, newborn and fetal	Chapter 7 Matching & Review **Due 2/28 .** Located under the learning Module.	Brain storm session: Why the autopsy rate is decreasing? On Blackboard, please post your initial post by Thursday 2/25 and at least one response to a classmate by Saturday 2/27.
3/1 to 3/7	7	**Review for Mid-Term (Chapters 1-7)**			I will hold a Teams meeting to assist anyone with questions or clarification of any formulas. TBA
3//8 to 3/14	8	**Mid-term (Chapters 1-7)**	**Will open on 3/8 and close at midnight on 3/14**		Due 3/14
3/15 to 3/21	9	**Spring Break**			
3/22 to 3/28	10	Lecture over Chapter 8	Chapter 8 Morbidity and Other Miscellaneous Rates • Discuss and calculate infection rate • Define and calculate the postop infection rate • Distinguish between a surgical procedure and a surgical operation • When provided with the appropriate data, compute the following rates: C-section, consultation and other rates	Chapter 8 Matching & Review **Due 3/28** Located in the learning module.	Complete Case Study 3.39 in the 1st Edition book/ 3.29 if you have the 2nd edition book post your answers on Blackboard discussion thread. Initial post due 3/25 and at least one response by 3/27
3/29 to 4/4	11	Lecture over Chapter 9	Chapter 9 Stats Computed within the HIM Dept. • Describe the uses of stats computed within the HIM dept in terms of unit cost, productivity, and staffing levels • Recognize how statistics are used in the creation of the HIM dept budget • Verify computerized statistical report for accuracy	Chapter 9 Matching & Review **Due 4/4** Located in the learning module.	Discussion how HIM dept statistics would be used in management. On Blackboard, please post your initial post by Thursday and at least one response to a classmate by Saturday.

			• Recalculate statistics for greater specificity • Generate computerized statistical reports		
4/5 to 4/11	12	Review Chapter 9 Test Lecture over Chapter 10	Review Chapter 9 Test Chapter 10 Descriptive Stats in Healthcare • Define descriptive stats • Define the terms rank, quartile, decile and percentile • Explain how and why percentile are used • Compute the percentile from an ungrouped distribution • Define and compute the mean, median and mode • Define and differentiate among range, variance, and standard deviation • Calculate range, variance, and standard deviation • Define and compute correlation	Chapter 10 Matching & Review Due **4/11** Located in the learning module	Review available statistics at the CDC and Prevention site. There are numerous articles that use descriptive stats. Choose and article and report findings to class through the discussion thread by Thursday and respond to another classmate's article by Saturday.
4/12 to 4/18	13	Lecture over Chapter 11	Chapter 11 Presentation of Data • Discuss categorical data: nominal, ordinal, interval and ratio • Differentiate between discrete data and continuous data • Describe and differentiate between tables and graphs • Create tables and graphs to depict statistical info • Understand the basic elements in preparing a report	Chapter 11 Matching & Review **Due 4/18** Located in the learning module	Complete the exercises to apply graphical tools to present data. Exercises 11.3 questions # 3&4; Exercise 11/4. Please post them in the discussion board Due 4/18
4/19 to 4/25	14	Lecture over Chapter 12	Chapter 12 Basic Research Principles Discuss IRB and understand its role in research.	Chapter 12 Matching & Review **Due 4/25** Located in the Learning module	Complete Case Study 3.11 & 3.13 1st edition/ or if you have the 2nd edition complete 3.8 and 3.10 Post to the discussion board **Due: 4/29** **Research the** "Tuskegee Study" and please discuss how this relates to the IRB. Post on Discussion Board. Due 4/23.

4/26 to 5/2	15	Lecture over Chapters 13	Chapter 13
			
			Inferential Statistics in Health Care
			• Define Inferential stats
			• Interpret the standard error of the mean and confidence intervals
			• Identify and describe the null hypothesis
			• Understand the importance of r test
			• Interpret ANOVA
			• Understand the significance of chi square
			
			Read Appendix A: An Introduction to Data Analytics
				Chapter 13 Matching & Review Due 5/2 Located in the Learning Module.	Complete case study 3.29 pg. 128 in the 2nd edition or case study 3.39 pg 144 in the 1st edition book. Post to the discussion board by 4/29.
					
					Go to Compare hospitals at https://www.medicare.gov/hospitalcompare/search.html? Choose 3 hospitals to compare, go to patient experience tab and at the bottom asks would you recommend this hospital. Analyze the information and determine what management could do with this type of information. Write a 1-1/2 report on what you found. On Blackboard, please post your paper by Thursday and at least one response to a classmate by Saturday.
					
					Complete EHRgo Data Analytics I, II and III: the following are the links to the assignments. **Due 5/2**
					
					https://web21.ehrgo.com/rd/?courseActivityId=13690;
					
					https://web21.ehrgo.com/rd/?courseActivityId=13692;
					
					https://web21.ehrgo.com/rd/?courseActivityId=13694.
					
					Please post your answers in the discussion board.

5/3 to 5/9	16	**Review for Final**			
5/10 to 5/13	17	**Final**			

Course Policies and Guidelines

Grade Appeal Process: Concerns about the accuracy of grades should first be discussed with the instructor. A request for a change of grade is a formal request and must be made within six months of the grade assignment. Directions for filing an appeal can be found in the student handbook.<https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf.

An appeal will not be considered because of general dissatisfaction with a grade, penalty, or outcome of a course. Disagreement with the instructor's professional judgment of the quality of the student's work and performance is also not an admissible basis for a grade appeal.
https://build.com.edu/uploads/sitecontent/files/student-services/Student_Handbook_2019-2020v5.pdf

Academic Success & Support Services: College of the Mainland is committed to providing students the necessary support and tools for success in their college career. Support is offered through our Tutoring Services, Library, Counseling, and through Student Services. Please discuss any concerns with your faculty or an advisor.

Attendance Policy: Students are expected to attend every class and be on time. Students that are more than 20 minutes late may be counted absent at the discretion of the instructor. If an absence occurs, the student must contact the instructor immediately to discuss the rationale for the absence. Makeup work is the responsibility of the student and making contact with fellow classmates is highly encouraged to get details on missed assignments. Leaving the class early (before being released by the Instructor) may result in an absence. Furthermore, attendance will be checked daily by the instructor.

Please Note: You are responsible for getting any missed notes, handouts, assignments, etc. pertaining to the completion of this class. If you are absent for any reason do not ask me for any paperwork that has been previously handed out or written on the board. IT IS YOUR RESPONSIBILITY.

Make-Up Policy:

As a student you are required to complete all lessons, assignments and test as part of each course within the program. **Work submitted after deadline is not accepted.** A zero will be placed in the grade book for late assignments unless specific arrangements have been made. The percentage of each activity will weight in the final grade, regardless if the student participates in the activity or test.

Concerns/Questions Statement: If you have any questions or concerns about any aspect of this course, please contact me using the contact information previously provided. If, after discussing your concern with me, you continue to have questions, please contact the Dean of Workforce and Continuing Education, Dr. Carla Boone, at 409-933-8616/cboone@com.edu.

Technology Outage Policy:

In case of ANY technological difficulties with Blackboard (i.e., accessing assignments, content, email, completing an assessment and/or loading assignments, etc.), please contact the Educational Technology Support at http://com.parature.com. Fill out a support ticket by clicking on the "Submit a Ticket". Support staff will be available to assist you Monday – Friday 8AM – 5PM. After 5 PM or on weekends, please call (409) 933-8453 and leave a message with your name, COM ID #, phone number, and state your issue. Someone will get back to you. In addition, please send me a message at kfrieze@com.edu or call me at 409-933-8414 or 409-789-5113 as to the issue(s) you reported, the date of the problem, and outcomes.

Withdrawal Policy: COM policy states: "Students who officially withdraw from a course for any reason, on or before "W" day will receive a "W" which is **April 26, 2021**. It is the student's responsibility to ensure that he/she is properly withdrawn from the course. **Ceasing to attend class does not officially withdraw a student from a course. As a rule, I do not drop students unless they ask me in writing to do so.** Therefore, if you know before "W" day that you will not be able to successfully complete the course, please send me an e-mail requesting that I drop you from the course. **If you do not request to be dropped from the course or drop the course yourself, at the end of the term you will receive the grade you have earned, even if it is a "F."**

ADA Statement: Any student with a documented disability needing academic accommodations is requested to contact Holly Bankston at 409-933-8520. The Office of Services for Students with Disabilities is located in the Student Success Center. https://www.com.edu/counseling

Counseling Statement: Any student that is needing counseling services is requested to please contact Holly Bankston in the student success center at 409-933-8520 or hbankston@com.edu. Counseling services are available on campus in the student center for free and students can also email counseling@com.edu to setup their appointment. Appointments are strongly encouraged; however some concerns may be addressed on a walk-in basis.

Early Alert Program: The Counseling Center at College of the Mainland has implemented an Early Warning Program. I have been asked to refer students to the program throughout the semester if they are having difficulty completing assignments or have poor attendance. If you are referred to the Early Warning Program you will be contacted by someone in the Counseling Department. As student success and retention is very important to us, someone from the Counseling Department will schedule a meeting with you to see what assistance they can offer in order for you to meet your academic goals.

Classroom Conduct Policy: College of the Mainland requires that students enrolled at COM be familiar with the Standards of Student Conduct, which can be found in the on-line Student Handbook. https://www.com.edu/student-services/student-handbook. Students should act in a professional manner at all times. Disruptive students will be held accountable according to college policy. Any violations of the Code of Conduct will result in a referral to the Office for student Conduct and may result in dismissal from this class.

Academic Dishonesty: Any incident of academic policy will be dealt with in accordance with college policy and the Student Handbook (pg. 19). Academic dishonesty – such as cheating on exams is an extremely serious offense and will result in a **grade of zero** on that exam and the student will be referred to the Office of Student Conduct for the appropriate discipline action. https://www.com.edu/student-services/student-handbook.

Plagiarism: Plagiarism is using someone else's words or ideas and claiming them as your own. Plagiarism is a very serious offense. Plagiarism includes paraphrasing someone else's words without giving proper citation, copying directly from a website and pasting it into your paper, using someone else's words without quotation marks. Any assignment containing any plagiarized material will receive a **grade of zero** and the student will be referred to the Office of Student Conduct for the appropriate discipline action. https://www.com.edu/student-services/student-handbook.

Student Learner Outcomes:

Upon successful completion of this course, students will:

1. Prepare statistical reports to support healthcare information and department operations and services.
2. Formulate statistics that meet medical and administrative reporting needs and requirements of government regulatory and voluntary agencies.
3. Analyze health care statistics, vital statistics, descriptive statistics, data validity, and reliability.
4. Assess methods of collecting healthcare data.
5. Utilize appropriate methods of data display.

Core Objectives: Students successfully completing this course will demonstrate competency in the following:

1. Critical Thinking: Students will demonstrate creative thinking, innovation, and the ability to analyze, evaluate, and synthesize information.
2. Communication Skills: Develop, interpret, and express ideas through written, oral, and visual communication
3. Empirical Quantitative Data: Students will include the manipulation and analysis of numerical data or observable facts resulting in informed conclusion

Student Learner Outcome	Maps to Scans Competency	Assessed via this Assignment
1. Students will be able to prepare statistical reports to support healthcare information and department operations and services. AHIMA Competency: III.3 Calculate statistics for healthcare operations (3)	Empirical and Quantitative Skills:	Final
	Critical Thinking	Final
2. Students will be able to demonstrate knowledge of analyzing healthcare statistics, vital statistics, descriptive statistics, data validity, and reliability	Critical Thinking	Final
3. Students will be able to demonstrate knowledge of assessing methods of collecting healthcare data	Critical Thinking	Discussion Chapter 12

AHIMA Competency: III.5 Describe research methodologies used in healthcare (2)		
4. Students will be able to demonstrate knowledge of utilizing appropriate methods of display. AHIMA Competency: 111.4 Report health care data through graphical representations (3)	Communication Skills; Visual	Chapter 11 quiz and exercises

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Success Tips for Students

Professionalism: Success in one's career is almost as dependent on professional behavior as on one's academic knowledge and abilities. Therefore, students are expected to exhibit professional behavior in the classroom as well as all activities with this course. Professional behavior includes:

- **Attends class and is punctual** – The student attends every class period, arrives on time for class activities or informs the instructor in a timely manner of unavoidable situations that cause the student to be late or miss class.
- **Dependable** – The student meets assignment deadlines and follows through to completion of responsibilities.
- **Effective interpersonal and team skills** – The student relates well to people, shows respect to others, deals tactfully and effectively with others, influences as opposed to directs, provides constructive criticism without altering others, negotiates or mediates when appropriate, exhibits openness to new ideas, and demonstrates a positive attitude.
- **Effective communication skills** – The student listens, speaks using correct grammar and without excess fillers, e.g. um, you know, like
- **Ethical conduct** – The student maintains honesty, integrity, and confidentiality of patient provider, fellow student and college information.

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Three Prior to Me: The HIM faculty encourages students to problem-solve, work as a team as well as utilize available resources. In order to develop these skills, we will employ the **"Three Prior to Me" process**. This means that before you contact the instructor with a course-related question, you must have attempted to find the information in three other places. For instance, if you are unsure about the meaning of a term used in the course, you would attempt to locate this information in three places prior to asking the instructor. Hence, you might do a Google search for the term, ask a classmate, and refer to your text book. Instructors **will** question you regarding what research methods you utilized to locate information on your own. This process is not meant to be a barrier to you, but instead to provide the following benefits:
-preparation for the workforce
-increased research skills
-instructors will have more time to provide feedback and interact with students
If you have a question that **ONLY** the instructor would know the answer to (grade-related, assessments, etc.), then of course you would go to the instructor directly. This process will require practice and patience from the student as well as the instructor.

AHIMA DOMAINS, SUBTASKS, AND TASKS

Domain III. Informatics, Analytics, and Data Use		
Competency	Bloom's Level	Chapter
III.3. Calculate statistics for health care operations.	3	3-10
III.4. Report health care data through graphical representations.	3	11
III.5. Describe research methodologies used in health care.	2	12