## Health Care Statistics (HITT 1255) Online

**Credit:** 2 semester credit hours (1 hour lecture; 3 hour lab)



#### Prerequisite/Co-requisite: HITT 1301, TSI Math Complete and

complete the Online Orientation and answer yes to 7+ questions on the Online Learner Self-Assessment: http://www.lit.edu/depts/DistanceEd/OnlineOrientation/OOStep2.aspx

## **Course Description:**

Study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures. *This course is time-bound, structured, and completed online with a proctored final.* 

## **Required Textbook and Materials:**

- 1. Horton, Loretta, Med, RHIA, FAHIMA (2017). *Calculating and Reporting Healthcare Statistics*, 5th Edition. Chicago, Illinois: AHIMA Press. a. ISBN-13: 978-1-58426-595-5
- 2. Battery operated calculator
- 3. Internet access

## **Course Objectives:**

*Upon completion of the course, the student should be able to:* 

- 1. Prepare statistics reports to support healthcare information and department operations and services.
- 2. Formulate statistics that meets 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 healthcare data.
- 5. Utilize appropriate methods of data display.

#### **Course Outline:**

- I. Introduction to Health Statistics
  - A. Statistics
  - B. Descriptive Statistics versus Inferential Statistics
- II. Mathematics Review
  - A. Fractions
  - B. Rounding Numbers
  - C. Percentage
  - D. Ratio
- III. Patient Census
  - A. Inpatient Census
  - B. Total Inpatient Service Days

- C. Calculation of Inpatient Service Days
- D. Average Daily Inpatient Census
- IV. Percentage of Occupancy
  - A. Percentage of Occupancy
  - B. Bed Turnover Rate
- V. Length of Stay
  - A. Bed/Bassinet Count Terms
  - B. Leave of Absence Days
- VI. Death (Mortality) Rates
  - A. Guidelines for Calculating Death Rates

#### HITT 1255 Online Course Syllabus

- VII. Hospital Autopsies and Autopsy Rates
  - A. Autopsy Rates
  - B. Hospital Autopsies
- VIII. Morbidity and Other Miscellaneous Rates
  - A. Morbidity Rates
  - B. Other Rates
- IX. Statistics Computed within the Health Information Management Department
  - A. Health Information Statistics
  - B. Unit Costs for Release of Information
  - C. Productivity
  - D. Staffing Levels
  - E. Budgets
  - F. Verification of Statistical Reports
  - G. Spreadsheets
- X. Descriptive Statistics in Healthcare
  - A. Concepts in Descriptive Stastics

- XI. Presentation of Data
  - A. Types of Data
  - B. Data Display
  - C. Preparing Reports
- XII. Basic Research Principles
  - A. Basic Research Principles
  - B. Types of Research
  - C. The Research Process
  - D. Data Interpretation Issues
- XIII. Inferential Statistics in Healthcare
  - A. Inferential Statistics
  - B. Standard Error of the Mean and Confidence Intervals
  - C. The Null Hypothesis
  - D. ANOVA
  - E. Chi-Square
- XIV. Data Analytics
  - A. Introduction to Data Analytics
  - B. Types of Data Analytics

### **Grade Scale:**

90 - 100	Α
80 - 89	В
70 - 79	C
60 - 69	D
0 - 59	F

#### **Course Evaluation:**

Final grades will be calculated according to the following criteria:

Assignments	20%
Participation / Discussion Boards	20%
Unit Exams (3)	45%
Final Exam	15%

#### **Course Policies:**

- 1. Students must provide their own textbooks, writing instruments, and other necessary supplies for classes.
- 2. Students must log onto Blackboard and access this course a minimum of 4-5 times per week.
- 3. Students must respect one another and all faculty.
- 4. Internet Usage Students are expected to use proper net etiquette while participating in course emails, assignment submissions, and online discussions.

- 5. No cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result in expulsion from LIT.
- 6. All exams will be taken on the scheduled dates. If a test is missed due to an emergency situation, the student will have one week to make it up; otherwise a grade of "0" will be assigned. The instructor MUST be contacted to receive prior approval to take the exam late.
- 7. All assignments are due when stated. Assignments submitted more than a week late will be reduced 25%.
- 8. Additional course policies are outlined in "Classroom Policies" provided at the beginning of the semester.
- 9. Students are expected to follow the Lamar Institute of Technology Code of Conduct and Disciplinary Policy
- 10. Any violation of classroom/online policies may result in student being asked to leave class and result in an absence.
- 11. If you wish to drop a course, the student is responsible for initiating and dropping the course. If you stop logging-in to the course and do not complete the course drop process, then you will earn an "F" grade for the course.
- 12. The instructor will respond to e-mail and voice mail communication within 24 hours Monday through Friday. Assignment grades will be published within 2 weeks of the assignment due date.
- 13. If, after all assignments have been submitted and graded, you have a Final Class Grade of "90 or Above", then you can choose to be exempt from the Comprehensive Final Exam. If your Final Class Grade is "90 or Above", you MUST email the instructor stating you choose to be exempt from the final due to your class average. If you have a "90 or Above", you choose not take the final exam, and you do not email me, then you will receive a "0" on the final. You can also choose to take the final exam, even if your Final Class Grade is "90 or Above".

# **Technical Requirements**

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at:

http://kb.blackboard.com/pages/viewpage.action?pageId=25368512

A functional internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources.

#### **Disabilities Statement:**

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737; visit the office in Student Services, Cecil Beeson Building or visit the online resource: <a href="http://www.lit.edu/depts/stusery/special/defaults.aspx">http://www.lit.edu/depts/stusery/special/defaults.aspx</a>

# **Student Code of Conduct Statement:**

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at <a href="www.lit.edu">www.lit.edu</a> or obtained in print upon request at the Student Services Office.