

Health Care Statistics (HITT 1255) Online



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

Prerequisite/Co-requisite: HITT 1301, MATH 1332 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. Koch, Gerda, MA, RHIA (2008). *Basic Allied Health Statistics and Analysis*, 3rd Edition. Albany, New York: Delmar Cengage Learning.
 - a. ISBN-13: 978-1-4283-2089-5
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:

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|---|---|
| I. Statistical Terminology and Health Care Data | 2. Patient Data Collection |
| A. Introduction | C. Statistical Data Terms, Definitions, and Abbreviations |
| 1. Statistics and Data | 1. Terms and Definitions |
| 2. Scope of Book | 2. Abbreviations |
| 3. Role of the HIM Professional | II. Health Care Overview and Patient Data Collection |
| 4. Requestors of Data | A. Health Care Overview |
| 5. Uses of Data | 1. Facilities and Health Care Providers |
| 6. Users of Health Care Data | 2. Payers/Payment Providers/Third Party Payers |
| 7. Sources of Health Care Data | 3. Beds/Bassinets Classifications |
| B. Data Collection | |
| 1. Governmental Data Collection (Public Health) | |

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Course Syllabus

4. Medical Care/Medical Staff/Medical Care Service Units
5. Transfers
- B. Patient Data Collection
 1. Data Entry/Collection
 2. Sources of Statistical Data
- III. Mathematical Review
 - A. Review of Basic Mathematical Functions
 1. Fractions
 2. Decimals
 3. Percentages
 4. Rates/Ratio/Proportion
 5. Averaging
 6. Rounding Data
 7. Converting to Another Form
 8. Computing with a Percentage
 - B. HIM Computational Applications
- IV. Census
 - A. Census Collection and Terms
 1. Census
 2. Inpatient Census
 3. Hospital Patients
 4. Hospital Departments
 5. Hospital Units and Services
 6. Census Taking
 7. Admitted and Discharged the Same Day (A&D)
 8. Census/Inpatient Census
 9. Daily Inpatient Census (DIPC)
 10. Inpatient Service Day (IPSD)
 11. Total Inpatient Service Days
 12. Deaths/Discharges
 13. Census Calculation Tips
 14. Beds/Bassinets
 - B. Average Census
 1. Average Daily Inpatient Census
 2. Other Formulae for Census Averages
 3. Example
- V. Percent of Occupancy
 - A. Bed/Bassinet Count Terms
 1. Inpatient Bed Count or Bed Complement
 2. Newborn Bassinet Count
 - B. Rate Formula
 - C. Beds
 1. Unit vs. Totals
 2. Excluded Beds
 3. Disaster Beds
 - D. Bed/Bassinet Count Day Terms
 1. Inpatient Bed Count Day
 2. Inpatient Bassinet Count day
 3. Inpatient Bed Count Days (Total)
 - E. Occupancy Ratio/Percentage
 1. Adults and Children (A&C)
 2. Newborn (NB)
 - F. Occupancy Percentage for a Period
 1. Bed (A&C)
 2. Bassinet (NB)
 3. Clinical Unit
 - G. Change in Bed Count During a Period
- VI. Length of Stay/Discharge Days
 - A. Terms
 1. Discharge
 2. Length of Stay (LOS)
 3. Total Length of Stay
 4. Discharge Days (DD)
 5. Average Length of Stay (ALOS)
 - B. Calculating Length of Stay
 1. General
 2. Admitted and Discharged (A&D) the Same Day
 3. Admitted One Day and Discharged the Next Day
 4. Longer Stays
 - C. Total Length of Stay
 1. Importance of Discharge Days
 2. Totaling
 - D. Average Length of Stay
 1. Adults and Children (A&C)
 2. Newborns (NB)
 - E. Day on Leave of Absence
- VII. Hospital Mortality Rates
 - A. Terms
 1. Mortality
 2. Deaths
 3. Net vs. Gross
 - B. Death Rates

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1. Helpful Hints
 2. Gross Death Rate
 3. Net Death Rate
 4. Newborn Death Rate
 5. Surgical Death Rates
- VIII. Obstetrical-Related Rates
- A. Terms
 1. Pregnancy Terms
 2. Maternal Death/Obstetrical Death Terms
 - B. Natality Classifications
 1. Newborn Birth Data Classifications
 2. Neonatal periods
 3. Fetal Death Classifications
 - C. Hospital OB Mortality (Death) Rates
 1. Maternal Death Rate
 2. Newborn and Infant Death Rate
 3. Fetal Death Rate (Stillborn Rate)
 - D. Cesarean Section Rates
 1. Cesarean Section Rate
 2. VBAC (Vaginal Birth After C-Section Rate)
- IX. Autopsy Rates
- A. Terms
 1. Autopsy
 2. Hospital Autopsy
 3. Coroner
 4. Medical Examiner
 - B. Coroner's Cases
 - C. Additional Autopsy Information
 1. Who Performs an Autopsy
 2. Where the Autopsy is Performed
 3. Deaths Autopsied
 4. Report Requirements
 5. Consent
 6. Combining A&C and NB
 - D. Autopsy Rates
 1. Gross Autopsy Rate
 2. Net Autopsy Rate
 3. Hospital Autopsy Rate (Adjusted)
 4. Newborn Autopsy Rate
 5. Fetal Autopsy Rate
- X. Miscellaneous Rates
- A. Rates
 1. Infection Rates
 2. Consultation Rates
 3. Complication Rate
 4. Comorbidity Rate
 5. Bed Turnover Rates

Grade Scale:

90 - 100	A
80 - 89	B
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 (Proctored)*	15%

*The student will be required to take the comprehensive final in a proctored environment.

Course Requirements:

1. Completion of chapter assignments
2. Completion of unit and final examinations
3. The student will post discussions as instructed along with any other assignments instructed to complete.
4. The student will complete online quizzes and unit exams by the due dates shown on the course calendar.
5. The student will be required to take the final exam in a proctored environment. If you live within 60 miles from campus, please plan to take the proctored exam within the LIT ACT Testing Center located in T1 Building. Learners from a distance may make alternative arrangements.

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%.

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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, 3G, 4G, WiMAX, WiFi, satellite, or other broadband access 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 or visit the online resource:

<http://www.lit.edu/depts/stuserv/special/defaults.aspx>

Course Schedule: (subject to change)

Week	Topic	Reference
1	Introduction/Orientation Chapter 1 – Statistical Terminology and Health Care Data	Text Book: p. 2 – 20 Online: Module 1, Chapter 1

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Week	Topic	Reference
2	Chapter 2 – Health Care Overview and Patient Data Collection	Text Book: p. 21 – 44 Online: Module 1, Chapter 2
3	Chapter 3 – Mathematical Review	Text Book: p. 45 – 62 Online: Module 1, Chapter 3
4	TEST 1 (Ch. 1- 3)	Online: Module 1 - Exam 1 Review & Exam 1
	Chapter 4 - Census	Text Book: p. 63 – 82 Online: Module 2, Chapter 4
5	Chapter 5 – Percent of Occupancy	Text Book: p. 83 – 100 Online: Module 2, Chapter 5
6	Chapter 6 – Length of Stay/Discharge Days	Text Book: p. 101 – 116 Online: Module 2, Chapter 6
7	TEST 2 (Ch. 4 – 6)	Online: Module 2 - Exam 2 Review & Exam 2
	Chapter 7 – Hospital Motility Rates	Text Book: p. 117 – 138 Online: Module 3, Chapter 7
8	Chapter 8 - Obstetric Related Rate	Text Book: p. 139 – 156 Online: Module 3, Chapter 8
9	Chapter 9 - Autopsy Rates	Text Book: p. 157 – 176 Online: Module 3, Chapter 9
10	TEST 3 (Ch. 7 – 9)	Online: Module 3 - Exam 3 Review & Exam 3
	Chapter 10 - Miscellaneous Rates	Text Book: p. 177 – 194 Online: Module 4, Chapter 10
11	Chapter 11 - Vital Statistics Data/Rates	Text Book: p. 195 – 212 Online: Module 4, Chapter 11
12	Chapter 12 - Frequency Distribution	Text Book: p. 213 – 232 Online: Module 4, Chapter 12

Week	Topic	Reference
13	Chapter 13 - Measures of Central Tendency and Variable	Text Book: p. 233 – 254 Online: Module 4, Chapter 13
14 & 15	Chapter 14 - Data Presentation	Text Book: p. 255 – 290 Online Module 4, Chapter 14
16	FINAL EXAM (Ch. 10 – 14) *Proctored*	Online: Module 4 - Final Exam Review & Final Exam

Contact information varies by instructor.

Proctoring Policy

1. Who is a Proctor?

A proctor is an impartial monitor who administers a student's exam and ensures the security and integrity of the exam process. If proctoring is required, it is the student's responsibility to make the appropriate arrangements, notify the instructor of the arrangements, and pay any incurred fees.

2. Where may you have your test Proctored?

Students may choose to have the exam proctored on the LIT campus or another acceptable proctored environment. LIT Proctoring services are free to LIT students. Other Proctoring services may require a fee paid for by the student.

- a. (1) Acceptable Proctors / Sites
 - i. Lamar Institute of Technology Testing Center
 - ii. Testing Center which is a member of the National College Testing Association (NCTA). To locate a site: <http://www.nctatesting.org/cctc/>
 - iii. Testing Center at an accredited college
 - iv. Superior officer of the military
- b. Unacceptable Proctors / Sites
 - i. Family members or relatives of the student
 - ii. Colleagues or co-workers
 - iii. Friends or peers or acquaintances
 - iv. Other students, whether from LIT or another campus

NOTE: The instructor reserves the right to deny any proctor, or to assign specific proctors as necessary.

3. What Are the Proctor's Responsibilities?

Each proctor must keep the exam in a secure area until the student takes the exam or if the exam is online, the password must be kept in a secure area.