

Name of Department	HEALTH INFORMATION TECHNOLOGY
Semester:	Spring 2019
Instructor Name: Office Location Office Hours	Roseanna McGinn Health Careers 122 By appointment only online or phone also available
E-mail Telephone Location	rmcginn@unm.edu 5058035373 online
Syllabus	
Title of Course:	Computer Applications and Healthcare Statistics
Course Number	HCHT 231
Course Description	This course introduces the student to computer applications in the healthcare industry and methods used to control security of information. Included are the concepts and procedures used in the preparation of statistical reports including vital statistics, census systems, rates and percentages. Presentation of these data using computer applications are practiced. Students will also utilize the electronic health record through the Vlab, and gain skill and confidence in searching for healthcare statistics directly inside of an electronic health record system
Credit Hours and Contact Hours	4 credit hours, 64 contact hours (48 in-class; 16 on-line hours)
Pre-requisites/co-requisites	HCHT 211, CS150L or Permission of the instructor
CAHIIM and AHIMA requirements	Below are the 2014 CAHIIM Competencies for Associates HIT Programs. By the end of this course, the student should be able to: <p style="margin-left: 40px;">Meet the requirements for CAHIIM domains.</p> <p>In this class we will cover domains</p> <p style="margin-left: 40px;">Domain I is titled Data content, structure and standards this is a domain including:</p> <ol style="list-style-type: none"> Data governance Data management <p style="margin-left: 40px;">Domain III is titled informatics, analytics and data use this is a domain including:</p> <ol style="list-style-type: none"> Health information technologies Information management strategic planning Analytic and decision support

	<ol style="list-style-type: none"> 4. Health care statistics 5. Research methods 6. Consumer informatics 7. Health information exchange 8. Information integrity and data quality
<p>Learning Objectives and Outcomes</p>	<p>At the end of this course the student will be exposed to:</p> <ol style="list-style-type: none"> 1. Compute and interpret healthcare statistics. 2. Describe various uses of data. 3. Compare and express data in formats appropriate to the user. 4. Identify abbreviations used in healthcare statistics. 5. Compute, compare and express daily census, period census and average census. 6. Compute, compare and express percentage of occupancy, length of stay and discharge days. 7. Compute, compare and express mortality rates, autopsy rates, nosocomial rates, cesarean section rates and morbidity rates. 8. Create, compute, compare and express a frequency distribution. 9. Understand, create, compare and express measures of central tendency, percentages and percentiles. 10. Construct, compare and express a histogram, frequency polygon, bar graph, line graph and pie graph. 11. Choose the correct physical parts of a computer through accurate labeling of hardware parts. 12. Design data using computer technology. 13. Define categories of computers and give examples of how they are used. 14. Describe the major functions of operating systems and how operating system software interacts with system and application software. 15. Explain the applications of word processing, spreadsheets, data bases and project management software. 16. Define the hardware, software, and connecting media required for creating a network. 17. Describe the requirements and the methods of maintaining privacy and security in network communication. 19. Plan the various modes of communicating over the Internet. 20. Discuss security and ethics issues of the Internet. 21. Gain skill in accessing data elements from the electronic health record/Vlab in order to calculate healthcare statistics for a clinic, for a hospital unit, and for an entire hospital during a specific period of time. 22. Present a technical project via Powerpoint or other presentation media on a research topic regarding healthcare statistics. 23. Collect and maintain health data, e.g., data elements, data

	<p>sets and databases.</p> <ol style="list-style-type: none"> 24. Collect, maintain and report data for clinical indices/data bases/registries to meet specific organization needs such as medical research and disease registries. 25. Collect, organize and present data for quality management, utilization management, risk management and other related studies. 26. Comprehend basic descriptive, institutional and healthcare vital statistics. 27. Abstract and report data for facility-wide quality management and performance improvement programs. 28. Analyze clinical data to identify trends that demonstrate quality, safety and effectiveness of healthcare. 29. Use technology including hardware and software to ensure data collection, storage, analysis and reporting of information. 30. Use common software applications such as spreadsheets, databases, word processing, graphics, presentation & e-mail in the execution of work processes. 31. Use specialized software in the completion of HIM processes. 32. Apply policies and procedures to the use of networks including internet and internet applications to facilitate the electronic health record, personal health record, public health and other administrative applications.
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<p>Required Books and Materials</p>	<p>Dana C. McWay, Today’s Health Information Management: An Integrated Approach 2nd Edition, ISBN-13: 978-1133592471, ISBN-10: 1133592473</p> <p>Statistics Workbook for Evidence-based Health Care Jennifer Peat, Belinda Barton, Elizabeth Elliott ISBN: 978-1-405-14644-9</p> <p>Vlab Subscription Cengage Unlimited Subscription</p>
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Attendance:
Students are required to attend every class on time, participate in discussions, quizzes and maintain a safe respectable, positive class environment.

Weekly online attendance, participation and submission of work assignments is **required**. If you don’t log in and do any of these, then you’re considered absent for the week, and will be marked as such. There are attendance points you can accrue. The instructor reserves the right to drop students with excessive absences (more than 1 class absences, or 2 missed weekly assignments of online work).

Missed Class/Submission of Late Work – Students are expected to contact the Instructor via email in a timely manner to advise if they will be unable to attend class, or unable to submit their weekly assignment. Students are responsible for all work to have any chance of passing the course.

Cell Phones:

Cell phones need to be put on mute during class times. If you must receive a call during class time leave the classroom before you answer. No phone conversations, text messaging, web surfing, movie watching etc. in classroom. Such actions (including talking to others in class out of context) can disrupt the learning process of other students and is grounds for being dropped from the course.

Student Code of Conduct:

Neither dishonesty nor unruly behavior will be tolerated in the classroom; such actions will lead to being dropped from the course. According to our Student Code of Conduct found on page 121 of the 2014–2016 UNM-Valencia Catalog:

“Appropriate disciplinary procedures and sanctions shall be applied to any student who commits, or attempts to commit, any of the following acts of misconduct:

2.4. Academic dishonesty, including, but not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.”

All Assignments unless otherwise specified must adhere to APA format and citation guidelines.

Students with Disabilities:

If you have a disability, please inform me of your special needs as soon as possible to ensure that those needs are met in a timely manner.

Evaluation/Grading Methods:

6 online chapter quizzes at 100 points total	600 points
10 Quizzes or Homework.....	1000 points
Statistics Project and Presentation	1200 points
Two Data Base Assignments.....	100 points
Two Bar Graph Assignments	100 points
Mid-Term.....	200 points
Four Vlab Activities.....	800 points
Statistics Notebook pictures	600 points
Final.....	200 points
TOTAL POINTS Possible.....	4800 points

Must have a C or above for it to count for HIT curricula not a C- or below.

GRADING SCALE:

A+	97% or greater
A	93% to 96%
A-	90% to 92%
B+	87% to 89%
B	83% to 86%
B-	80% to 82%
C+	77% to 79%
C	73% to 76%
Below failing grades	
C- to F-	72% to 0%

All Papers to be submitted in APA 6th Edition

Short papers are not to exceed five pages typed body text.

Vlabs answers must be typed and screen shots must be included in the assignment document to show completion of all the steps. Vlabs are the only papers not to be submitted in APA 6th edition format.

The instructor reserves the right to amend, modify, or change assignments.

Week

**Week ASSIGNED;
Due the Following Week
Sunday at 11:59pm
Unless otherwise stated
Quizzes; And Other assignments.**

	Cengage Pre Statistics Mind Tap	Cengage Health care statistics	Statistics Project, Statistics Journal and Extra credit AHIMA book
1	Chapter 1 and Chapter 2	Chapter 1	Statistics project assigned
2	Chapter 3	Chapter 2	
3	Chapter 4	Chapter 3	

4	Chapter 5	Chapter 4	
5	Chapter 6	Chapter 5	
6	Chapter 7	Chapter 6	
7	Chapter 8	Chapter 7	Statistics Workbook for Evidence-based Health Care Jennifer Peat, Belinda Barton, Elizabeth Elliott ISBN: 978-1-405-14644-9 Statistics Journal pictures 300 points
8	Chapter 9	Chapter 8, Chapter 9	

9	Chapter 10	Chapter 10	
10	Chapter 11	Chapter 11	
11	Chapter 12	Chapter 12	
12	Chapter 13	Chapter 13	
13	Chapter 14	Chapter 14	
14	Chapter 15	Chapter 15	Extra Credit AHIMA Statistics Journal Due 800 points
15			Statistics project Due
16	MindTap Due Wednesday at 10am	MindTap Due Wednesday at 10am	
	MindTap Points for Pre Statistics Math 1839 points	MindTap Points for Health Care Statistics 810 *2.5= 2025 points	Statistics project 2000 points Statistics Journal 300 points Extra Credit AHIMA Statistics Journal 800 points