

Syllabus

Course Number: HIM 460

Course Title: Health Statistics and Research Methods

Course Description:

An applied course in basic health statistics and research methods intended to introduce common applications in the health care setting: emphasis is on the ability to analyze and interpret clinical and other health data for use in research, health care decision-making, and policy development as well as the ability to locate, read, and use published research relevant to identified subjects; topics include commonly used health statistics, the process of research, epidemiology, outcomes research, case mix, registries, Institutional Review Board, and ethics in research.

Prerequisite Courses:

MT 274 or equivalent introductory statistics course.

Course Outcomes:

Upon completion of this course, learners should be able to:

- Locate relevant published research in topics of interest.
- Discuss the growing importance of statistical and research methods in the health care setting.
- Identify common data sources internal and external to the health care organization.
- Apply basic statistical formulas related to administrative and epidemiological applications
- Evaluate the reliability and validity of health related statistical information and make recommendations for appropriate use.
- Comprehend the process of research.
- Describe basic research methods and techniques as they relate to performing research, quality improvement activities and outcome evaluation.
- Explore various applications and skills related to the collection, analysis, interpretation and presentation of statistical data and information.
- Read and understand research reports.
- Understand the field of epidemiology.
- Understand the guidelines to the protection of human research subjects.
- Describe the process of evaluation by the Institutional Review Board.
- Discuss ethical concerns in research.
- Present an analysis of an research report.

- Apply the process of research using a topic of interest.

Required Texts:

Basic Allied Health Statistics and Analysis; Fourth Edition; Gerda Koch; Delmar Publishers

Health Informatics Research Method: Principles and Practice; Layman and Watzlaf; AHIMA; 2009.

Pre-Assignment:

Online Format: Sign on to D2L (Home Page) and become familiar with the course navigation of the Web Curriculum.

Pre-Assignment Due Dates:

Online Format: The instructor will specify the due date for this assignment.

Course Assignments and Activities:

	Topics	Readings	Activities Assignments and Associated Points
1	The Principles of Information Resource Management	Basic Allied Health Statistics Chapters 1, 3, 4 & 5 Appendix I Glossary & Appendix II Formulae Instructor Lecture	Discussion: Introductions & Health care Statistics (10) Problem Set #1 (25)
2	Fundamentals of Relational Database Design	Basic Allied Health Statistics Chapters 6-8 Appendix I Glossary & Appendix II Formulae Instructor Lecture	Discussion: Length of Stay (10) Problem Set #2 (25)
3	Data Analysis and Design	Basic Allied Health Statistics Chapter 9-11 Appendix I Glossary & Appendix II Formulae Instructor Lecture	Discussion: Morbidity & Mortality Rates (10) Problem Set #3 (25)
4	Analyzing Healthcare Data	Basic Allied Health Statistics Chapters 12 & 14 Instructor Lecture Review for Midterm Exam	Discussion: Vital Statistics (10) Problem Set #4 (25) Midterm Exam (75)

5	Data Types and Description	Health Informatics Research Methods Chapters 1, 2, 8 & 9	Discussion: Current Research (10) Library Research & Article Selection (25) Week Five Review Questions (15)
6	Data Quality	Health Informatics Research Methods Chapters 2-6 & 9	Discussion: Ethnographic & Experimental Research (10) Research Analysis Part 1 (30)
7	The Information Resource Management Plan	Health Informatics Research Methods Chapters 10-11 Basic Allied Health Statistics Chapters 2 & 13	Discussion: Data Sets (10) Research Analysis Part2 (30) Week 7 Review Worksheet (25)
8	The Analysis of Healthcare Data	Health Informatics Research Methods Chapters 10, 11 & 13 Review all Chapters for Final Exam	Discussion: Ethics in Research (10) Research Analysis Part3 (30) Final Exam (75)
			Maximum Points Possible: 500

CC&IS Grading Scale

Letter Grade	Percentage	Grade Point
A	93 to 100	4.00
A-	90 to less than 93	3.67
B+	87 to less than 90	3.33
B	83 to less than 87	3.00
B-	80 to less than 83	2.67
C+	77 to less than 80	2.33
C	73 to less than 77	2.00
C-	70 to less than 73	1.67
D+	67 to less than 70	1.33
D	63 to less than 67	1.00
D-	60 to less than 63	.67
F	Less than 60	0

Additional information about grading can be found in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx>.

CC&IS Policies and Procedures

Each of the following CC&IS Policies & Procedures is incorporated here by reference. Students are expected to review this information each term, and agree to the policies and procedures as

identified here and specified in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx> or at the link provided.

- The CC&IS Academic Integrity Policy.
- The Student Honor Code and Student Standards of Conduct.
- Incomplete Grade Policy, Pass / No Pass Grades, Grade Reports.
- The Information Privacy policy and FERPA. For more information regarding FERPA, visit the [U.S. Department of Education](http://www.ed.gov).
- The HIPAA policies for protected health information. The complete Regis University HIPAA Privacy & Security policy can be found here: <http://www.regis.edu/About-Regis-University/University-Offices-and-Services/Auxiliary-Business/HIPAA.aspx>.
- The Human Subjects Institutional Review Board (IRB) procedures. More information about the IRB and its processes can be found here: <http://regis.edu/Academics/Academic-Grants/Proposals/Regis-Information/IRB.aspx>.

The CC&IS Policies & Procedures Syllabus Addendum summarizes additional important policies including, Diversity, Equal Access, Disability Services, and Attendance & Participation that apply to every course offered by the College of Computer & Information Sciences at Regis University. A copy of the CC&IS Policies & Procedures Syllabus Addendum can be found here: <https://in2.regis.edu/sites/ccis/policies/Repository/CCIS%20Syllabus%20Addendum.docx>.

