

**JOLIET JUNIOR COLLEGE
DEPARTMENT OF COMPUTER INFORMATION
AND OFFICE SYSTEMS**

COURSE SYLLABUS

Course Prefix and Number	HIM 120
Course Title	Statistical Tools for Health Information Technicians
Curriculum	Computer Information & Office Systems
Lecture	3
Lab	0
Credit Hours	3
Prerequisites	HIM 101. Knowledge of basic addition, subtraction, multiplication, and division facts are assumed.

Catalog Description

Health information Management Technicians need to understand the meaning of statistical data and how it was derived. In this course students will learn terms related to statistics and how to compute specified rates using appropriate formulae through a hands-on approach. This course is a study of percentages, ratios, and basic statistics needed in the health care field. Students will learn that Health Information Management (HIM) professionals are often in the forefront of collecting and presenting much of the data needed in a health care facility. Students will learn the appropriate data elements and their appropriate use. They will understand that results are only as reliable as the data input, which must be accurate, appropriately analyzed, and understood.

Course Objectives: See attached.

Prepared by:

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12/09

Reviewed by:

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Department Chairperson Date

STUDENT MATERIALS

A. Textbook

Title: Basic Allied Health Statistics and Analysis, 3rd Edition.

Author: Koch

Publisher: Delmar/Cengage

AND

Title: Case Studies in Health Information Management

Author: Sayles & Schnering

Publisher: Thomson/Delmar

B. Other Required Materials: None

Student Evaluation (Type of Grading)

Classroom, Attendance and Withdrawal/Drop Policies:

Attendance is required and graded. You may be dropped from this course for poor attendance, poor academic performance or poor behavior. Please see your registration form for “refund” drop date and “course withdrawal” drop date. Failure to withdraw properly may result in a failing grade in this course.

Please silence your cell phone during class.

Academic Misconduct:

Academic integrity is a fundamental principle of collegial life at Joliet Junior College and is essential to the credibility of the College’s educational programs. The College, therefore, views any act of academic dishonesty as a serious offense requiring disciplinary measures, including course failure, suspension, and possible expulsion from the College.

Late/Missed/Make-Up Work Policies:

Late/Missed work will receive a 10 point deduction and will only be accepted within one week of the due date. A zero will be recorded as your grade if the work is not submitted by the next scheduled class.

If you miss a quiz/exam, you must make it up before the next scheduled class meeting. Otherwise, a zero will be recorded as your grade.

Grading Scale:

90%-100%	A
80%-89%	B
70%-79%	C
60% - 69%	D
59% and below	F

A. PROJECTS

Completion of Case Studies

B. PAPERS (no. of pages, expository writing done outside of class required and graded in addition to essay examinations):

None

C. EXAMS AND WHAT TYPE:

Completion of Chapter tests and final exam.

JOLIET JUNIOR COLLEGE COURSE SYLLABUS

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FORM C, Part II: TOPICAL OUTLINE

Course Prefix and Number: HIM 120 Title: Statistical Tools for Health Information Technicians

Week	Unit, Topic, Class Activity (Indicate approximate time allotment for each topic/unit)	Comments
1	Statistical Terminology and Health Care Data Complete Chapter 1 Test	
2	Health Care Overview and Patient Data Collection Complete Chapter 2 Test	
3	Mathematical Review Complete Chapter 3 Test	
4	Census Complete Chapter 4 Test	
5	Percent of Occupancy Complete Chapter 5 Test	
6	Length of Stay/Discharge Days Complete Chapter 6 Test	
7	Hospital Mortality Rates Complete Chapter 7 Test	
8	Obstetrical-Related Rates Complete Chapter 8 Test	
9	Autopsy Rates Complete Chapter 9 Test	
10	Miscellaneous Rates Complete Chapter 10 Test	
11	Vital Statistics Data/Rates Complete Chapter 11 Test	
12	Frequency Distribution Complete Chapter 12 Test	
13	Measures of Central Tendency and Variation Complete Chapter 13 Test	
14	Data Presentation Complete Chapter 14 Test	
15	--Review of Case Studies --Review for Final Exam	
16	Final Examination (All Chapters)	

OBJECTIVES

1. Define “statistics” and “data”.
2. Describe the role of the HIM professional in health care data collection.
3. Identify requestors of data.
4. Identify uses and users of health care data.
5. Identify major sources of health care data.
6. Identify abbreviations used in health care statistics.
7. Distinguish between various types of health care facilities.
8. Explain fraction, quotient, decimal, ratio, proportion, rate and percentage.
9. Distinguish between the numerator and denominator of a fraction.
10. Average a set of numbers.
11. Round data to a specified number.
12. Convert a number from one form to another form.
13. Distinguish between census, inpatient census, and daily inpatient census.
14. Distinguish between intrahospital transfer vs. interhospital transfer.
15. Distinguish between adults and children and newborns and bed vs. bassinet count.
16. Define inpatient service day and admitted and discharged.
17. Define “period” as used with regard to statistical computation.
18. Describe when a census is to be taken.
19. Identify deaths that are excluded from inpatient statistics.
20. Compute daily census, period census and average census.
21. Compute bed and bassinet occupancy percentage.
22. Define “length of stay” and “discharge days”.
23. Compute individual lengths of stay, total lengths of stay for a designated period and average length of stay.
24. Define mortality.
25. Compute gross death rate, net death rate and surgical death rates.
26. Distinguish clearly between direct and indirect maternal death, abortion, stillbirth, and fetal death.
27. Define delivered/undelivered, puerperium, neonate. neonatal, prenatal and postneonatal.
28. Compute maternal, newborn and fetal death rates.
29. Compute gross, net, hospital, newborn and fetal autopsy rates.
30. Describe and distinguish which autopsies are included in hospital autopsies.
31. Compute infection rates, consultation rates, complication rate and comorbidity rates.
32. Compute vital statistics rates/proportions.
33. Construct a frequency distribution.
34. Compute mean, median, mode, variance, and standard deviation.
35. Determine the type of table and/or chart/graph appropriate for presenting different types of data.
36. Create a data table.
37. Construct a bar chart/column chart, pie chart, line chart and comparison chart using computer software.
38. Interpret statistical graphs
39. Distinguish among and interpret pictograms, stack bar charts and percent stack charts.
40. Use various formulas to calculate other health care statistics.