

# HS 074: INFORMATICS FOR HEALTH SCIENCE

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**Originator**

kspurgin

**Justification / Rationale**

I received information from CTE Coordinator Beth Allen Bentley and Sector Navigator Wendy Deras that the TOP, CIP, and SAM codes were not correct. Our Dean Leslie Young authorized that I update the course.

**Effective Term**

Fall 2020

**Credit Status**

Credit - Degree Applicable

**Subject**

HS - Health Sciences

**Course Number**

074

**Full Course Title**

Informatics for Health Science

**Short Title**

HS INFORMATICS

**Discipline****Disciplines List**

Health

**Modality**

Face-to-Face

**Catalog Description**

This course provides an overview of the computer software used by members of the Health Science profession. It will introduce students to the software in: assessment, planning, education, program implementation and management currently used in health science and allied health. It will introduce students to programs such as statistical packages, Project management, GIS, and Electronic Health Records. The course will also cover the legal and ethical use of software linked to client care.

**Schedule Description**

Overview and application of informatics and software currently used in health science education and careers.

**Lecture Units**

3

**Lecture Semester Hours**

54

**Lab Units**

0

**In-class Hours**

54

**Out-of-class Hours**

108

**Total Course Units**

3

**Total Semester Hours**

162

**Required Text and Other Instructional Materials****Resource Type**

Book

**Author**

Nelson, R. Stagers, N.

**Title**

Health Informatics – An Interprofessional Approach

**Edition**

2nd

**City**

St. Louis, MO

**Publisher**

Elsevier

**Year**

2018

**College Level**

Yes

**Flesch-Kincaid Level**

13

**ISBN #**

978-0-323-40231-6

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**Resource Type**

Web/Other

**Description**

data storage device - Flash Drive

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**Class Size Maximum**

30

**Course Content**

1. Course begins with and overview of the software applications that will be used during the student's education in health science. Students receive step by step direction through basic software applications as they complete weekly assignments in Microsoft Word, Excel, PowerPoint, Prezi, podcast, and others as they respond to health science topics.
2. The course will continue with an over view of the application currently utilized in health science programs for assessment, documentation, planning, program implementation, management, and statistical analysis. Students will be guided through software such as GIS, SPSS, electronic medical records, personnel health records and Microsoft Project.
3. Topics include: Health information (HI) overview; Healthcare Data, Information access, and documentation; Electronic Health Records, Health Information Exchange, Barcodes. Data Standards; Architectures of Information Systems; Health Information Privacy and Security; HI Ethics; Mobile Technology; Online Medical Resources; Search Engines; Evidence-Based Medicine and Clinical Practice Guidelines; The course will cover the different applications, and appropriate use, determining which particular application is most affective in each situation.

**Course Objectives**

Objectives	
Objective 1	Learn to search databases at a beginner level
Objective 2	Learn to use Electronic Health Records (EHR) to gather and input data
Objective 3	Learn to utilize an Excel spreadsheet to enter data and produce graphs
Objective 4	Learn to utilize SPSS for data entry and statistical analysis
Objective 5	Learn to utilize Microsoft Project to produce a Work Breakdown Structure
Objective 6	Learn to utilize PowerPoint to produce a presentation
Objective 7	Learn to utilize software to integrate applications into documents
Objective 8	Learn to utilize Geographical Information System (GIS) software
Objective 9	Explain the legal and ethical application connected with using software for client data including HIPPA, security, and plagiarism.

**Student Learning Outcomes**

Upon satisfactory completion of this course, students will be able to:	
Outcome 1	Demonstrate basic use of software applications that pertain to assessment, planning, education, program implementation and management currently used in health science and allied health.
Outcome 2	Explain the concepts of ethical use in health care informatics.
Outcome 3	Describe the legal issues surrounding health care records and personal information.

**Methods of Instruction**

Method	Please provide a description or examples of how each instructional method will be used in this course.
Journal	Students will keep an electronic journal on a flash drive with an example of each applications practiced.
Discussion	Discussion of practical use for each application in the field of health science and health science education. Discussion of the ethical use of electronic in health science.
Demonstration, Repetition/Practice	Demonstration of each application including use of help menu.
Technology-based instruction	Computer programs and applications used in health science and for success in a health science program. GIS, Excel, statistical analysis, Graphing, Mail Merge, SPSS, data bases for regional data, electronic medical records, and clinical decision support.

**Methods of Evaluation**

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Guided/unguided journals	Electronic journal of saved screenshots, documents, charts and tables.	In and Out of Class
Presentations/student demonstration observations	PowerPoint presentation.	In and Out of Class
Tests/Quizzes/Examinations	Midterm and final examinations	In Class Only
Tests/Quizzes/Examinations	Take home quizzes	Out of Class Only

**Assignments**
**Other In-class Assignments**

Students will prepare a PowerPoint or Prezi presentation which will include:

1. Research on health outcomes (e.g. Diabetes) including data for the Coachella Valley
2. This data then will be entered into a spreadsheet and create charts for clarification.
3. GIS map of Zip code areas to high light affected areas
4. SPSS will be used to determine the statistical relevance

Students will prepare an electronic journal that will include:

1. A saved document from each application.
2. A screenshot of the help menu for each application.
3. A letter sent by email with a document merge.
4. Student will navigate an electronic medical record and create a screenshot of data entered into the record.
5. Screenshot of a clinical decision support tool
6. Document describing the ethical use of health IT and HIPPA.

Students will perform a Peer Evaluation of the group project

**Other Out-of-class Assignments**

Assigned reading prior to class.

Practice applications and complete PowerPoint / Prize started in class.

Take-home quizzes

Group project

**Grade Methods**

Letter Grade Only

**Comparable Transfer Course Information****University System**

CSU

**Campus**

CSU San Bernardino

**Course Number**

HSCI 273

**Course Title**

Software Applications

**Catalog Year**

2012 2013

**Rationale**

Both course offer and overview and use of the software applications used in health science; including assessment, planning, use of regional databases, statistical analysis and graphing. They also include applications that assist in the success of a student in a health care program.

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**MIS Course Data****CIP Code**

51.9999 - Health Professions and Related Clinical Sciences, Other.

**TOP Code**

129900 - Other Health Occupations

**SAM Code**

D - Possibly Occupational

**Basic Skills Status**

Not Basic Skills

**Prior College Level**

Not applicable

**Cooperative Work Experience**

Not a Coop Course

**Course Classification Status**

Credit Course

**Approved Special Class**

Not special class

**Noncredit Category**

Not Applicable, Credit Course

**Funding Agency Category**

Not Applicable

**Program Status**

Program Applicable

**Transfer Status**

Transferable to CSU only

**Allow Audit**

No

**Repeatability**

No

**Materials Fee**

No

**Additional Fees?**

No

**Approvals****Curriculum Committee Approval Date**

9/19/2019

**Academic Senate Approval Date**

9/26/2019

**Board of Trustees Approval Date**

10/31/2019

**Chancellor's Office Approval Date**

12/09/2019

**Course Control Number**

CCC000609665

**Programs referencing this course**Applications and Information Systems AS Degree (<http://catalog.collegeofthedesert.eduundefined?key=223/>)Business Information - Medical Office Specialist Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined?key=228/>)Pharmacy Technician Certificate of Achievement (<http://catalog.collegeofthedesert.eduundefined?key=236/>)Health Science AS Degree (<http://catalog.collegeofthedesert.eduundefined?key=65/>)