BIT 206

COMPUTERS IN THE MEDICAL PROFESSION

3 Credit Hours

Prepared by:
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Career & Technical Education
Dr. John R. Keck, Dean
Brenda Russell, Associate Dean
BIT 206 COMPUTERS IN THE MEDICAL PROFESSION

I. CATALOG DESCRIPTION

A. Prerequisite: CIS 133 Microcomputer Software Applications

B. 3 semester hours credit

C. This course prepares the student to work with the computer technology used by the medical transcriptionist to accomplish the tasks used in the medical profession. (F,S)

II. EXPECTED LEARNING OUTCOMES/ASSESSMENTS MEASURE

<table>
<thead>
<tr>
<th>Students will demonstrate their knowledge of computer terminology used in medical professions.</th>
<th>Students will take written exams pertaining to the terminology.</th>
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<tbody>
<tr>
<td>Students produce medical documents using a word processor.</td>
<td>Students will produce a manual of all the medical documents produced in the class.</td>
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<tr>
<td>Students will produce spreadsheets.</td>
<td>Students will work as a team project in producing spreadsheets for an office for medical information.</td>
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<tr>
<td>Students will build computer databases.</td>
<td>Students will work as a group project in producing databases for an office for medical files.</td>
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<tr>
<td>Students will produce presentations using presentation software.</td>
<td>Students will give a presentation using PowerPoint about recruiting new clients to the office.</td>
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<tr>
<td>Students will demonstrate their ability to use various billing and coding software used in the medical profession.</td>
<td>Students will do a simulation project using billing and coding software for the office.</td>
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<tr>
<td>Students will demonstrate their ability to use patient management software.</td>
<td>Students will do a class assignment using patient management software for the development of a new filing system.</td>
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III. COURSE OUTLINE WITH UNIT OBJECTIVES

A. Computers in the Medical Profession
   1. Identify general use of computers in medical organizations.
   2. Identify ways a computer can help a medical professional
   3. Discuss the types of software used in the medical profession
   4. Identify ways medical research can be conducted using a computer
   5. Understand basic medical organization security issues and why good security measures are imperative in a medical organization
B. Word Processing
1. Create, edit, and modify merge documents
2. Merge envelopes
3. Create, modify, customize, and format a table
4. Apply borders and shading to a table
5. Apply an autoformat to a table
6. Create a form for handwritten entries
7. Create a form and save it as a template
8. Fill in and print a form document
9. Edit a form template
10. Create and fill in a form with a form field drop-down list

C. Spreadsheet Software
1. Use the AVERAGE, MAX, and MIN formulas to perform statistical analysis
2. Create TODAY and DATE formulas
3. Create an IF formula to return a result based on a logical test
4. Create, edit, and format charts
5. Insert, size, and move a picture
6. Draw arrows and text boxes
7. Change margins
8. Center a worksheet horizontally and vertically
9. Create a custom header and footer
10. Print row heading, column headings, and gridlines
11. Scale a worksheet to fit within a specified number of pages
12. Add records, filter and sort a list

D. Database Management Systems
1. Integrate database information with spreadsheet/word processing documents
2. Create table relationships
3. Modify database using advanced queries like combine, calculate, update, duplicate
4. Design and use forms in database
5. Use import feature for database and table

E. Presentation Software
1. Apply formatting with Format Painter
2. Change alignment, line, and paragraph spacing
3. Draw a text box
4. Insert headers and footers
5. Change the slide design and color scheme
6. Insert, format, size, and move clip art images
7. Create and format organizational charts and diagrams
8. Insert and format WordArt
9. Add an animation scheme to a presentation
10. Add Sound to a presentation

F. Billing and Coding Software
   1. Learn what billing and coding software entail
   2. Identify why accurate billings are important to medical professions
   3. Explain the computerized billing and coding process
   4. Explain how reports generated from a billing process can help an office

G. Patient Management
   1. Learn the components of patient management
   2. Demonstrate why patient management is important to a medical organization
   3. Explain how reports generated from patient management can help an office

IV. METHOD OF INSTRUCTION
   A. Lecture
   B. Demonstration using the Smart Classroom equipment
   C. Computer simulations

V. REQUIRED TEXTBOOK(S) WITH PUBLICATION INFORMATION

VI. REQUIRED MATERIALS (STUDENT)
   Three-ring binder for handouts, flash drive for documents, pen, pencils, and paper

VII. SUPPLEMENTAL REFERENCES
   A. CD with medical documents
   B. Websites with medical documents

VIII. METHOD OF EVALUATION (basis for determining grade)
   A. Homework 10%
   B. Quizzes 15%
   C. Tests 15%
   D. Projects-lab assignments 60%
IX. ADA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library – phone 636-797-3000, ext. 169)

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook – see College website.