COURSE: Structured Application Development - (BUAD 2381-01)

COURSE CREDIT: 3.0 Credit Hours

INSTRUCTOR: Mehdi S. Tehrani (PhD)

OFFICE LOCATION: Decker Hall- Room 25

OFFICE HOURS: M, W, F, 11-12:00 noon, 1:00PM-2:00PM, T, TH, 11:00-4:00pm

PHONE NUMBER: 218-755-2751 (Office)-1800-475-2001-ext-2751

FAX: 701-755-4100

E-mail: mtehrani@bemidjistate.edu

ADDRESS: 1500 Birchmount Drive, NE, Bemidji, MN 56601.

CLASS LOCATION: DH115 / 19A

CLASS SCHEDULE: MWF, 10:00am-10:50 am

FIRST DAY OF CLASS: Monday August 23rd, 2010

LAST DAY OF CLASS: Monday Dec 6th 2010

PREREQUISITE: BUAD 2280 / CS1141

REQUIRED TEXTBOOK:

Title - COBOL for the 21st Century
Author - N. Stern, R.A. Stern
Year - 11th edition, 2006
Publisher - J. Wiley
ISBN - 0-471-72261-8 (with no software)
         0-470-18151-6 with Compiler

EXTERA READING:
2. Sams Teach Yourself COBOL in 24 Hours, By T.Hubbell, Sams, 1999.

COURSE OBJECTIVES:

Develop highly structured business application computer programs to solve managerial and organizational problems. Topics include file processing, conditionals, data manipulation, reporting, and control break processing. Projects are PC, minicomputer, and mainframe computer compatible. Theory and application of the COBOL programming language is taught as used in commercial installations. Students prepare programs from applications commonly encountered in business and industry.

LEARNING OBJECTIVE OUTCOMES:

After completing this course the students are able to do following:
- Would be able to use Micro Focus NetExpress Version 5.00
- Would be able to use COBOL Compiler
- Would be able to develop both Batch and Interactive Applications
- Would be able to develop business application using COBOL programming language
- Would be able analyze and solve business problems

<table>
<thead>
<tr>
<th>Learning outcomes</th>
<th>Measures</th>
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<tbody>
<tr>
<td>Programming concepts</td>
<td>Reading chapters, take quizzes, and Hands-on experience, Discussion, Final exam</td>
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<tr>
<td>Using compiler</td>
<td>Doing projects, and Hands-on experience,</td>
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<tr>
<td>analyze and solve business problems</td>
<td>Read chapters, do projects, discussion</td>
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<tr>
<td>develop both Batch and Interactive Applications</td>
<td>Hands on experiences, projects</td>
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COURSE DESCRIPTION:

UNIT I: The Basics

Chapter 1  An Introduction to Structured Programming Design in COBOL, History of COBOL, An overview of four Divisions
Chapter 2  The IDENTIFICATION and ENVIRONMENT DIVISION
The basic of structure of COBOL program, General Rules
Chapter 3  The DATA DIVISION
The way data is organized, The rules for data-names and constant, How data storage can be reserved
Chapter 4  Coding Complete COBOL Programs: The PROCEDURE DIVISION
Access I/O, Read Data from Input, Move Operation
UNIT II: Designing Structured Programs

Chapter 5  Designing and Debugging Batch and Interactive COBOL Programs
How structured programs should be designed, Pseudocode and Flowcharts, Hierarchy Charts, The logic Control structure,

Chapter 6  Moving Data, Printing Information, and Displaying Output Interactively Validation, Techniques, The various options of MOVE, The rules for MOVE, How to print decimal points.

Chapter 7  Computing in COBOL: The Arithmetic Verbs and Intrinsic Functions, The formats and options with Arithmetic verb.

Chapter 8  Decision Making Using the IF and Evaluate Statements Selection Using IF Statement and Other options

Chapter 9  Iteration: Beyond the Basic PERFORM Simple PERFORM Statement and Other types

LECTURE SCHEDULE:

Chapter 1  Weeks 1, 2, Projects & quiz #1 Projects and quiz date will be announced after completing chapters 1-2.
Chapter 2  Weeks 3,4. Projects & quiz #2 Projects and quiz date will be announced after completing chapter 2.
Chapter 3  Weeks 5,6 Projects & quiz #3 Projects and quiz date will be announced after completing chapter 3.
Chapter 4  Weeks 7,8 Projects & quiz #4 Projects and quiz date will be announced after completing chapter 4.
Chapter 5  Week 9 Projects & quiz #5 Projects and quiz date will be announced after completing chapter 5.
Chapter 6  Week 10 Projects & quiz #6 Projects and quiz date will be announced after completing chapter 6.
Chapter 7  Weeks 11,12 Projects & quiz #7 Projects and Quiz date will be announced after completing chapter 7.
Chapter 8  Weeks 13,14 Projects & quiz #8 Projects and Quiz date will be announced after completing chapter 8.
Chapter 9  Weeks 15,16 Projects & quiz #7 Projects and Quiz date will be announced after completing chapter 9.

Final Exam  Dec 9th, 1:00pm-3:00pm

GRADING POLICY:

<table>
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<td>Quizzes</td>
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<td>Final Exam</td>
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<td>Discussion + Questions</td>
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Sample grading system:

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QUIZZES AND EXAMS MATERIAL:

Questions in the quizzes are in MC/TF format and are based on textbook. After covering each chapter, you will be given a quiz comprised of about 20 questions. The majority of questions in the final exams (F-E) are from the quizzes that you have taken.

FORMAT OF PROJECTS FOR SUBMISSION:

- Cover page: Name, Project #, chapter #, Project title
- Source codes
- Data files /Input files (copy) + Output file
- All the above as hard copies before deadline

LATE PENALTIES:

1. Late written or software assignments will not be accepted.
2. THERE WILL BE NO MAKEUP QUIZZES OR FINAL EXAMINATION.

ATTENDANCE:

1. Students will attend class regularly. If attendance is impossible, obtain class notes from a fellow student, and then study them for understanding.
2. To get an excuse from class students must inform at least three working days in advance, unless it is impossible to do so.
3. Only 15% absences are allowed which include both excused and unexcused.
ACADEMIC HONESTY:

Cheating on the work for this class will not be tolerated and will result in a failing final grade. The college experience is founded on the concepts of honesty and integrity. Dishonesty, cheating, plagiarism, or knowingly furnishing false information to the college is regarded as particularly serious offenses. Cases of dishonesty will be handled by levying certain penalties. Cheating on the work for this class will not be tolerated and will result in a failing final grade. However, in flagrant cases, the penalty may be dismissal from the college after proper due process proceedings.

DISCRIMINATION:

Bemidji State University does not discriminate on the basis of sex, religion, creed, national origin, race, age, disability, or any other basis prohibited by law. If you believe you have been discriminated against unlawfully, please bring this matter to the attention of your instructor or the BSU's Human Resource Office.

SPECIAL ACCOMMODATIONS:

In coordination with the Disability Support Service, reasonable accommodations will be provided for qualified students with disabilities (LD, Orthopedic, Hearing, Visual, Speech, Psychological, ADD / ADHD, Health Related & Other). Please meet with the instructor during the first week of class to make arrangements. Accommodations and alternative format print materials (large print, audio, disk or Braille) are available through the Disability Support Service, located in Office for Students with Disabilities Sanford Hall (218-755-3883).

GOOD LUCK!