JEFFERSON COLLEGE
COURSE SYLLABUS

CIS153
INTRODUCTION TO VISUAL BASIC PROGRAMMING

3 Credit Hours

Revised by:
David McNair
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CIS153 Introduction to Visual BASIC Programming

I. CATALOGUE DESCRIPTION

A. Pre-requisite and/or Co-requisite: CIS133 Microcomputer Software Applications and Reading Proficiency

B. 3 Credit Hours

C. Introduction to Visual BASIC Programming is an introductory course in event driven programming in the Microsoft Visual BASIC; a popular Microsoft Windows based programming language. Students will learn the full range of this language through lectures and programming projects. Topics include developing forms, controls, properties, methods, programming loops, arrays and web pages. Database connectivity is also studied. (F,S,O)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

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<th>Demonstrate effective form, logic and control construction</th>
<th>Assignments</th>
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<td>Tests</td>
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<td>Develop application skills to construct programming logic code examples</td>
<td>Presentation</td>
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<td>Class Participation</td>
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<td>Projects</td>
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<td>Develop form and program formatting skills using properties and methods</td>
<td>Presentation</td>
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<td>Class Participation</td>
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<td>Projects</td>
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<td>Analyze common business practices and problems to effectively solve common logic problems</td>
<td>Presentation</td>
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<td>Projects</td>
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<td>Use and develop writing and programming tools to debug and &quot;translate&quot; technical information to non-specialists</td>
<td>Presentation</td>
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<td>Projects</td>
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<tr>
<td>Develop projects to show looping and array skills in event driven programming</td>
<td>Tests</td>
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<td>Projects</td>
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III. OUTLINE OF TOPICS

A. Introduction to Programming
   1. Developing IDE
   2. Structured Programming Techniques
   3. OOP concepts, objects properties and methods

B. User Interface Design
   1. Program modes
   2. Developing controls such as text boxes, group boxes, check boxes, etc.
   3. Programming logic

C. Variables, Constants, and Calculations
   1. Data type and scope variables
   2. Error handling
   3. Programming logic

D. Effects with Forms Controls
   1. Common tools
   2. Coding and debugging options
   3. Miscellaneous events and options

E. Decisions and Conditions
   1. Logical operators
   2. IF statements and case structure
   3. Debugging IDE

F. Menus, Dialog Boxes, Sub Procedures
   1. Calling general sub procedures
   2. Function procedures

G. Transforming Illustration Objects
   1. Introduction and practice
   2. Creating a layer mask
   3. Layer transformation
H. Multiform Projects
   1. Splash and about forms
   2. Common dialog boxes
   3. General procedures

I. Lists Loops and Printing
   1. Using print and print preview
   2. Combo and list boxes
   3. Looping logic
   4. Arrays

J. Accessing Database files – Using database connection controls

IV. METHOD(S) OF INSTRUCTION

A. Lectures: Important material from the text and outside sources will be covered in class. The major objective is to prepare the student for the Programming project assignments during the lecture. Discussion is encouraged as is outside material relevant to topics being covered.

B. Assignments: Projects will be periodically assigned to reinforce project material in the text.

C. Exams: Two programming projects will be used as testing material. This will be very similar to projects that are assigned in class. The exams will be open book and open notes.

D. Student Demonstrations of Projects: Students develop their own projects and give a demonstration and explanation in class of the construction process.

V. REQUIRED TEXTBOOK(S)


VI. REQUIRED MATERIALS

USB Storage Device (Flash Drive)
VII. SUPPLEMENTAL REFERENCES

Library Resources: present offerings and anticipated texts, journals, video/audio tapes, software, etc. (Current library holdings are sufficient to support this proposal.)

VIII. METHOD OF EVALUATION

A. Class Participation 30% Students will have opportunities to question, present ideas and concepts, respond to questions from other students and instructor

B. Project Assignments 40% Students will be assessed on individual programming solutions projects

C. Tests 20% Two programming projects will measure student performance

D. Student Presentation 10% One student presentation programming project of students choosing

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Technology Center 101; phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College Website http://www.jeffco.edu).

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.
XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.