

LINCOLN UNIVERSITY
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
COURSE SYLLABUS

COURSE TITLE: Introduction to Computer Programming
COURSE NUMBER: CSC-152
CREDITS: 3
PREREQUISITE MAT 098 (Algebra I)

COURSE DESCRIPTION:

This introductory programming course is designed for non-computer science majors. This course introduces the student to principles of computer programming via a visual programming language. The students will learn to create graphical user interface forms and apply visual programming to problem solving. Topics will include basic control statements. Event-driven programming will be an integral part of the course.

REQUIRED TEXT (S)/ MATERIALS:

Sam's teach yourself Visual BASIC 2008 in 24 hours

INSTRUCTOR INFORMATION:

Instructor: Ali Barimani
Office Location: Nelson Science Center Room 222
Phone: 1-484-365-7442
Office Hours: MWF: 11:00AM- 12:00AM
TR : 11:00AM- 12:30PM
W: 01:00PM- 02:00PM

For full schedule information please see: <http://www.lincoln.edu/math/faculty/abarimaniinfo.html>

COURSE STUDENT LEARNING OUTCOMES:

The student will

- **CSLO #1:** Demonstrate fundamental skills in utilizing the tools of a visual language environment such as Microsoft Visual BASIC, in terms of the set of available command menus and toolbars and create several Graphical User Interface forms.
- **CSLO #2:** Demonstrate knowledge of fundamental programming Input/ Output and control statements.
- **CSLO #3:** Remove errors of type syntax, logical, and run-time errors and handle (catch) some run-time errors.
- **CSLO #4:** Demonstrate knowledge of both event-driven programming and procedural programming.
- **CSLO #5:** Write VB codes to solve problems from various disciplines.

UNIVERSITY CORE STUDENT LEARNING OUTCOMES:

- **UCSLO #2:** Critical Thinking
- **UCSLO #6:** Quantitative Reasoning

DIRECT ASSESSMENT MEASURES FOR CSLOS:

- **CSLO #1:**
 - 1) Practical Tests questions G.U.I
 - 2) Projects on creation of forms
- **CSLO #2:**
 - 1) Written Tests on writing control statements
- **CSLO #3:**
 - 1) Written test on debugging
 - 2) Practical test on debugging
- **CSLO #4:**
 - 1) Written tests on procedures
 - 2) Practical tests on even-driven programming
- **CSLO #5:**
 - 1) Projects on problem-solving
 - 2) Written tests on problem-solving

TENTATIVE SCHEDULE OF WEEKLY ASSIGNMENTS:

(WEEK 1-3)

Visual and component programming environment

- . Visual BASIC studio Visual set of menu commands
- . Visual BASIC studio Visual toolbar
- . Form creation
- . VB objects, object Properties

(WEEK 4)

- . Data types
- . Variables and their scopes

(WEEK 5-7)

Control Statements

- . IF - ENDIF statements
- . IF-ELSE-ENDIF statements
- . FOR-NEXT loops
- . DO - UNTIL loops

(WEEK 8)

- . Event-driven programming

. Introduction to using VB in Problem-Solving

(WEEK 9-10)

Functions

- . User-defined functions
- . String functions
- . Math functions
- . Misc Built-in functions

(WEEK 11-12)

Arrays

- . Declaring arrays of variables
- . Declaring arrays of controls and objects
- . Applications of arrays

(WEEK 8-15)

- . **Miscellaneous Problem solving**

COMPUTER PROJECTS:

Projects are assigned about every **two-three weeks**. Computer Projects will be given on material covered in class. General computer labs are available throughout the campus for students to do their work. The students are encouraged to make regular visits during office hours, to meet in study groups, and to use the Computer/ Programming Tutors (if available).

Late Work and Make-Ups

All computer projects, assignments, and exams must be completed by the scheduled date. Late assignments or make-up tests or quizzes will only be allowed with **official documentation** and grades may be lowered. To qualify for a make-up, a student must have notified the professor and rescheduled in a timely manner.

CALCULATION OF FINAL GRADES:

The final score will be calculated based on the scores earned on tests, projects, assignments, and in-class work listed below using a weighted average formula shown. The Final letter grade will be awarded using the grading scale guideline shown.

Tests:	80%
Assignments and Projects:	20%

FINAL SCORE= (Test Points Earned)/(Total Test Points) * 80 + (Assignments and Projects Points Earned)/(Total Assignments and Projects Points) * 20

The grading scale guideline: **

A	92-100%
A-	88-91%
B+	85-87%
B	82-84%
B-	78-81%
C+	75-77%
C	72-74%
C-	68-71%
D+	65-67%
D	58-64%
F	0-57%

UNIVERSITY POLICY:

1) Attendance:

Lincoln University uses the class method of teaching, which assumes that each student has something to contribute and something to gain by attending class. It further assumes that there is much more instruction absorbed in the classroom than can be tested on examinations. Therefore, students are expected to attend all regularly scheduled class meetings and should exhibit good faith in this regard. For the control of absences, the faculty adopted the following regulations: Four absences may result in an automatic failure in the course.

Three tardy arrivals may be counted as one absence.

Absences will be counted starting with whatever day is specified by the instructor but not later than the deadline for adding or dropping courses.

In case of illness, death in the family, or other extenuating circumstances, the student must present documented evidence of inability to attend classes to the Vice President for Student Affairs and Enrollment Management. However, in such cases the student is responsible for all work missed during those absences.

Students representing the University in athletic events or other University sanctioned activities will be excused from class (es) with the responsibility of making up all work and examinations. The Registrar will issue the excused format to the faculty member in charge of the off- or on-campus activity for delivery by the student(s) to their instructors.

STUDENTS WITH DISABILITIES STATEMENT:

Lincoln University is committed to non-discrimination of students with disabilities and therefore ensures that they have equal access to higher education, programs, activities, and services in order to achieve full participation and integration into the University. In keeping with the philosophies of the mission and vision of the University, the Office of Student Support Services, through the Services for Students with Disabilities (SSD) Program, provides an array of support services and reasonable accommodations for students with special needs and/or disabilities as defined by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities

Act of 1990. The Services for Students with Disabilities Program seeks to promote awareness and a campus environment in which accommodating students with special needs and/or disabilities is natural extension of the University's goal.

UNIVERSITY ACADEMIC INTEGRITY STATEMENT:

Students are responsible for proper conduct and integrity in all of their scholastic work. They must follow a professor's instructions when completing tests, homework, and laboratory reports, and they must ask for clarification if the instructions are not clear. In general, students should not give or receive aid when taking exams, or exceed the time limitations specified by the professor. In seeking the truth, in learning to think critically, and in preparing for a life of constructive service, honesty is imperative. Honesty in the classroom and in the preparation of papers is, therefore, expected of all students. Each student has the responsibility to submit work that is uniquely his or her own. All of this work must be done in accordance with established principles of academic integrity.