

**COURSE SYLLABUS**

**Spring 2012**

**COURSE TITLE:** **Logic, Design, & Programming
NUMBER/SECTION: CINS 113-[section number]**

**CONTACT INFORMATION**

**INSTRUCTOR:**

**Name: [instructor name]**

**Phone Number: [instructor phone]**

**Email (Ivy Tech Email): [instructor email address]**

**Office/Campus Location: [office location]**

**Office Hours: [office hours / post on Blackboard]**

**Instructor’s Supervisor:**

**Name: [supervisor name]**

**Phone Number: [supervisor phone]**

**Email (Ivy Tech Email): [supervisor email address]**

**Office/Campus Location: [supervisor office location]**

**Distance Education Contact:**

**Name: [de contact name]**

**Phone Number: [de contact phone]**

**Email (Ivy Tech Email): [de contact email address]**

**Office/Campus Location: [de contact office location]**

**Office/Campus Location: [de contact office hours]**

**PREREQUISITES:** Demonstrated competency through appropriate assessment or earning a grade of “C” or better in ENG 031 Reading Strategies for College I.

**SCHOOL:** Business

**PROGRAM:** Computer Information Systems

**CREDIT HOURS:** 3

**CONTACT HOURS**: Lecture 3

**DATE OF LAST REVISION**: Spring, 2011

**REVISION EFFECTIVE DATE:** Spring, 2011

**CATALOG DESCRIPTION** Introduces the structured techniques necessary for efficient solution of business-related computer programming logic problems and coding solutions into a high-level language. Includes program flowcharting, pseudocoding, and hierarchy charts as a means of solving these problems. The course covers creating file layouts, print charts, program narratives, user documentation, and system flowcharts for business problems. Reviews algorithm development, flowcharting, input/output techniques, looping, modules, selection structures, file handling, and control breaks. Offers students an opportunity to apply skills in a laboratory environment.

**MAJOR COURSE LEARNING OBJECTIVES:** Upon successful completion of this course the student will be expected to:

1. Identify the standard program flowchart symbols and use them correctly within the context of the basic control structures of sequence, selection, and looping.

2. Design print charts, file layouts, program narratives, hierarchy charts, and system flowcharts, which accurately depict the problem assigned.

3. Design the algorithm of the solution to a programming problem using a program flowchart and ANSI standard flowcharting symbols.

4. Design the algorithm of the solution to a programming problem using pseudocode.

5. Describe the solution using a structure (hierarchy) chart.

6. Code the program in a high-level programming language based on a created design.

7. Design documentation that is easily understood by the diverse user.

8. Develop programs that open files, read records from the files, process the records, and close the files when processing is finished.

9. Develop programs that input data from the terminal and output it to the monitor and other devices.

10. Develop programs using modules, which are reusable segments of code.

11. Discuss the fundamental concepts of object-oriented programming, including objects, methods, classes, inheritance, and related topics.

12. Discuss graphical user interfaces and menu systems.

**COURSE CONTENT**: Topical areas of study include:

Menu Systems The Program Development Life Cycle

Unit Testing Basic Control Structures

System Testing Flowcharting

Simple Sequence Graphical User Interfaces

Case Structure Modules, Arrays and Tables

Looping File Processing and Control Breaks

If...Then...Else Object-Oriented Programming

**ACADEMIC HONESTY STATEMENT**

The College is committed to academic integrity in all its practices. The faculty value intellectual integrity and a high standard of academic conduct. Activities that violate academic integrity undermine the quality and diminish the value of educational achievement.

Cheating on papers, tests or other academic works is a violation of College rules. No student shall engage in behavior that, in the judgment of the instructor of the class, may be construed as cheating. This may include, but is not limited to, plagiarism or other forms of academic dishonesty such as the acquisition without permission of tests or other academic materials and/or distribution of these materials and other academic work. This includes students who aid and abet as well as those who attempt such behavior.

**COPYRIGHT STATEMENT**

Students shall adhere to the laws governing the use of copyrighted materials. They must insure that their activities comply with fair use and in no way infringe on the copyright or other proprietary rights of others and that the materials used and developed at Ivy Tech Community College contain nothing unlawful, unethical, or libelous and do not constitute any violation of any right of privacy.

**PLAGIARISM STATEMENT:**

Presenting within one’s own work the ideas, representations, or words of another person without customary and proper acknowledgment of that person’s authorship is considered plagiarism. Students who are unsure of what constitutes plagiarism should consult with their instructors. Claims of ignorance will not necessarily excuse the offense. The instructor reserves the right to use the resources of the College to check student work for plagiarism.

**Inappropriate use of College Computers:**

Theft or other abuse of computer time is against college rules, which include but are not limited to:

* unauthorized entry into a file, to use, read, or change the contents or for any other purpose
* unauthorized transfer of a file
* unauthorized use of another user's identification and password
* use of computing facilities to interfere with the work of another student, faculty member or college official
* use of computing facilities to send, receive, or view obscene or abusive messages
* use of computing facilities to interfere with normal operation of the college computing system
* use of computing facilities for student's personal benefit
* unauthorized use of college owned computer resources to prepare or print work for commercial purposes

**Consequences of Dishonest Behavior:**

A student found behaving dishonestly according to the above definition may be subject to either of the following penalties at the discretion of the course instructor: the student may receive a score of zero for the academic work in question or a grade of F for the course. If the student chooses to dispute the action, he/she may appeal to the Student Status Committee (see Student Handbook Due Process Procedures for Student Conduct Violations for more information regarding student rights.).

**ADA STATEMENT:**

Ivy Tech Community College seeks to provide reasonable accommodations for qualified individuals with documented disabilities. If you need an accommodation because of a documented disability, please contact the Office of Disability Support Services. If you will require assistance during an emergency evacuation, notify your instructor immediately. Look for evacuation procedures posted in your classroom.

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**REQUIRED TEXT AND MATERIALS**

Title: Programming Logic & Design Comprehensive *(*with Videos to Accompany)

Author: Joyce Farrell

Edition: 6th Edition

Publisher: Course Technology

ISBN: ISBN 978-0-538-74476-8

Title: Clearly Visual Basic Programming with Microsoft Visual Basic 2010

Author: Diane Zak

Publisher: Course Technology

ISBN: ISBN 978-1-111-53015-0

Visual Basic 2010

Internet Access

Storage Media

**HOW TO OBTAIN YOUR TEXTBOOK**

All books and materials, unless otherwise noted, can be purchased from the Ivy Tech online bookstore. To order the texts required for this class or any other on-line course, go to <http://www.ivytech.bkstr.com>. You can order all books and all materials for all courses from this site – regardless of whether you are taking the courses on campus or at a distance. Please note that you will need a copy of your course schedule to accurately order your books and materials. You may print a copy of your course schedule from Campus Connect at [http://cc.ivytech.edu](http://cc.ivytech.edu/).

Students who live in Indiana and surrounding states will normally receive their book order within one day from the time the book is shipped from the warehouse. Paying for overnight shipping on textbook orders from the bookstore is normally not a good use of your money as it does not ensure overnight processing of your order – it only ensures that once the book order has been processed, it will be shipped out overnight.

**SPECIAL TECHNOLOGY NEEDS**

Because this is a web-based course, it is expected that all students who enroll in the course have Internet access and a basic understanding of computer and Blackboard use (e.g., using emails, sending attachments via emails, using web browsers, accessing course within Blackboard). Also, it is expected that all students will regularly check their Ivy Tech email accounts (located in Blackboard). This is the PRIMARY method the instructor will utilize for contact with you.

**Software:** The software used in this course is ***Microsoft Visual Basic 2010 for Windows****.* The Express Edition is free from Microsoft, and the link is on Blackboard. You must have this software on the computer you are using for this course. Internet access is also required. If you do not have this software or internet access, you can use one of the computer labs in library at your Ivy Tech campus.

**USB drive:** You must have a safe place to keep all files you create for this class. A USB/flash drive is recommended. You also need a secondary place to store files. Many students back up their work on their home hard drive or off line through their service provider. Whichever you chose, make sure you have both a USB/flash drive and a secondary source for backing up your work.

**Headphones or earbuds**: The textbook includes videos and PowerPoints. You MUST bring your own headsets or other listening device with you when you come to campus to use any computer or for tutoring.

Please visit the Distance Learning Web site at: <http://www.ivytech.edu/distance/> for more information related to technology requirements for online courses. Check with the nearest campus bookstore for educational pricing if additional software is required for this course.

**COMPUTER DOWNLOADS**

Please visit the **Click for Help** tab for information about computer downloads. This page provides you with important computer information, including security software, viewer software for users without Microsoft products, adobe reader, flash player, java, and more.

**COMMUNICATIONS - EMAIL**

All students must use the **EMAIL** function of the course for course related communications. You can send email from within the course or by going directly to your email inside Campus Connect.

To access EMAIL from within the course, look below the green course menu buttons. (Click on **Communication, then SEND EMAIL**). Please DO NOT use the MESSAGES feature inside Communication. To send an email to your instructor, select All Instructor Users. To send an email to another member of the class, choose Select Users and choose the name(s) from the list.

When using EMAIL, all replies can be found inside your @ivytech.edu inbox inside Campus Connect. In fact, instead of sending EMAIL as described above, you could go directly to your INBOX and type in the recipient’s email address in a new message.

To access Campus Connect, go to: <http://cc.ivytech.edu/cp/home/loginf>. After logging in, go to your email by clicking on EMAIL in the list at the top right corner.

**COURSE REQUIREMENTS**

Remember, the Course Calendar is a good way to stay on top of course due dates. Refer to it often. All work must be submitted by the date and time posted in the course calendar. All times given in this course are Eastern Standard Time.

**AM I REQUIRED TO COME TO CAMPUS FOR THIS COURSE?**

No, you do not have to come to campus for this course. There are no activities, labs, or assessments that require you come to campus.

**OPTIONAL CAMPUS SUPPORT**

You are welcome to use the services and equipment available at the Ivy Tech Campus most convenient to you. Services include academic advising, equipment, libraries, and tutoring. Please locate the Ivy Tech campus most convenient to you at <http://ivytech.edu/campuses/>.

**VIRTUAL LIBRARY**

The Ivy Tech Virtual Library is available to students on- and off-campus, offering full text journals, books, and other resources essential for course assignments. The Virtual Library can be accessed from the “Virtual Library” tab in Blackboard or from the “Library” tab in Campus Connect.

**METHOD(S) OF INSTRUCTIONAL DELIVERY**

**INSTRUCTIONAL METHOD**

This is an online distance-learning course. Each week’s assignments and readings are displayed on the Course Calendar, accessed from the “Syllabus” menu button on Blackboard. It takes a great deal of discipline, self-motivation and effective time management skills to successfully complete an online course. Many students find it helpful to set aside specific times each week to work on course assignments.

**INSTRUCTOR COMMITMENT**

Ivy Tech Community College instructors are committed to responding to students within two business days.

**GRADES**

All grades will be maintained in Blackboard’s online grade book. Students are responsible to track their progress by referring to the online grade book.

**MAKE-UP POLICY**

If you have a SERIOUS problem that can be documented/verified and that keeps you from submitting a paper or test on time, please contact your professor immediately. The professor will determine if the seriousness of your problem warrants an exception to the late assignment rule. Late assignments will be assigned a grade of “0” unless you have received prior approval from the Professor. There are No make-ups for discussion boards. If you have upcoming planned events (e.g. vacation, wedding, birth of a child, surgery, etc.), you may work ahead on assignments. In all cases, communication with the professor in advance is desired, whenever possible.

You are responsible for timely assignment submission. Should your personal computer system or network go down, you must still turn in your work in a timely manner. Don’t wait until the last minute. Plan ahead by seeking alternative means for submitting your work in case needed. Local libraries and all Ivy Tech Community College campuses can serve as alternative resources. Contact your campus or other public lab for schedules and Internet availability. Not having access to the required software on your home or work computer is **NOT** a legitimate excuse for turning in homework late.

**LAST DAY TO WITHDRAW**

If you wish to withdraw from this course, you are responsible for completing an official withdrawal form with the registrar. **The last day to withdraw from this course is SUNDAY, APRIL 8, 2012**.

**RIGHT OF REVISION**

The college reserves the right to change any statements, policies or scheduling as necessary. Students will be informed promptly of any and all changes.

**METHOD(S) OF EVALUATION**

**QUIZ REQUIREMENTS**

You will have three attempts to take each chapter quiz within the allotted time. Each chapter quiz consists of 15 multiple-choice questions, and you will have 30 minutes to complete the quiz. The quizzes will be automatically graded, and the highest score of your three attempts will be posted to the grade book in Blackboard.

**Your grade in this course is determined by the following criteria:**

|  |  |
| --- | --- |
| **Points Possible** | **Graded Assignments** |
| 10 | Email to Instructor with course & section in subject |
| 160 | Discussion Boards – 8 @ 20 pts each |
| 280 | Review Questions (Farrell) – 14 @ 20 pts each |
| 420 | Chapter Quizzes (Farrell) – 14 @ 30 pts each |
| 280 | Chapter Labs (Zak) – 14 @ 20 pts each |
| 75 | Midterm Exam/Project |
| 75 | Final Exam/Project |
| **Total Points 1300** |  |

\*NO make-up or extra credit will be available at any time during the course.

**GRADING SCALE**

90 – 100 % 1170 - 1300 A

80 – 89 % 1040 - 1169 B

70 – 79 % 910 - 1039 C

60 – 69 % 780 - 909 D

Below 60 % below 780 F

**ASSIGNMENTS:**

All assignments (e.g. Discussion Boards, Chapter Labs (Zak), Midterm Exam/Project, and Final Exam/Project) and other information will be posted in the current class session.

Discussion Boards Assignments are due during the time frame designated for the discussion period.

Late discussion board postings will not be accepted.

Penalties for late submission of assignments (Zak Labs with the exception of Zak Lab from Session 1 which is a quiz)

Late assignments will not be accepted. Assignment submission links will be removed in Blackboard upon the due date and time per the syllabus in the Course Calendar.

Proper grammar and punctuation will be assumed as basic skills previously learned. Spell checkers and grammar checkers are available in the Microsoft Office application software.

**TESTS:**

Review Questions (Farrell) and Chapter Quizzes (Farrell) are timed, and are not removed from Blackboard.