

Course Syllabus

PREFIX, NUMBER, AND TITLE: INFS 605: Information Systems Programming

CREDIT HOURS: 3 graduate credits

UNIVERSITY NAME: Dakota State University

ACADEMIC TERM/YEAR: Fall 2008

COURSE MEETING TIME AND LOCATION:

Section D01 Internet

Section D02 Internet

INSTRUCTOR'S CONTACT INFORMATION:

Name: Christopher J. Olson

Office: East Hall Room 104B

Phone: 605-256-5688 (office)

605-256-5165 (secretary)

Office hours: Virtual **see Description of Instructional Methods*

Physical - Wednesday afternoons and by appointment

Email address: chris.olson@dsu.edu

COURSE DESCRIPTION:

Catalog Description: Planning, coding, and testing computer programs that can be used for business applications. Emphasis will be on programming event-driven graphical user interfaces.

COURSE PREREQUISITES:

Technology Skills: Word processing, Internet Desire2Learn, and electronic mail. Students will be required to use email for communication. Desire2Learn will be used to deliver course materials and weekly assignments, as well as serve as a communication tool between students and faculty.

***DESCRIPTION OF INSTRUCTIONAL METHODS:**

Students will be given lab assignments, quizzes, and exams through an online medium. Students should expect to login to the Desire2Learn site several times a week. Students must be motivated to stay on task and complete the coursework without benefit of lecture sessions. Keeping up on reading the assigned chapters and notes will be absolutely necessary for completing the labs (assignments) on time.

You are expected to use the steps in the textbook to complete the programs in the tutorials. Doing so should give you the skills you need in order to successfully complete the lab assignments. Looking the textbook over or reading it several times is not the same as actually using the code to create the desired programs.

Because this is an online class delivered through Desire2Learn, it is crucial that you have reliable access to the Internet on a regular basis. You should have a backup plan if needed, as the inability to connect to the Internet is **NOT** a valid excuse for missing a submission deadline.

I will be available most afternoons and evenings to answer questions. Email is my preferred form of communication and I check regularly throughout the day. While I cannot guarantee you an immediate answer to your inquiry, I will always do my best to reply in a timely manner. It is unlikely that you will ever have to wait more than a day for a response.

COURSE REQUIREMENTS:

Required Textbook And Other References:

Starting Out with Visual Basic 2008, 4/E
Tony Gaddis, Haywood Community College
Kip Irvine, Florida International University
ISBN-10: 0321531353
ISBN-13: 9780321531353
Publisher: Addison-Wesley
Copyright: 2009

Required Software:

You will need a version of Microsoft Visual Basic 2008 to complete this course. If you do not have access to this, you can [download Microsoft Visual Basic 2008 Express Edition](#) for free. You will need to register it within 30 days, but you can do so free of charge.

Attendance Policy: Attendance is expected through Desire2Learn and the submission of assignments, quizzes, and tests. You will not be successful in this course without regular participation and attendance through Desire2Learn.

Academic Integrity Policy: Copying and cheating will be severely punished. Identical or nearly identical electronic submissions of any form will be closely scrutinized to detect cheating. While the free flow of ideas and information is essential to an education, the exchange of assignments and materials cannot be. Dakota State University pledges itself to continue its commitment to provide students with a quality education. To this end, the faculty of DSU will not tolerate academic dishonesty in any form. The Academic Integrity Policy clarifies the definition of academic dishonesty, the student's rights, and the faculty rights and responsibilities to prohibit, limit, and censure violations of academic integrity. Please see the student handbook for penalties concerning student cheating. [DSU's Academic Integrity Policy is available online.](#)

All forms of academic dishonesty will result in a failing grade (as in absolutely no credit) on the assignment. If you copy from another or allow another to copy from you, you have cheated. Any student who does so will automatically be penalized so that a B will be the highest letter grade he or she may earn for an overall course grade. A formal acknowledgement that you violated academic integrity policies will be placed in your permanent academic records. If there is a second offense by the same student(s), they will fail the course.

Make-up Policy for Missed Submission Deadlines:

- **Tests:** Make-up examinations **will not be given unless prior approval is granted from the course instructor.** Tests will be given via Desire2Learn and only made available at certain times. I have tests available for a full week, so plan accordingly so you can take the test before the deadline passes.
- **Assignments:** Late labs will be penalized one letter grade per school day and will not be accepted after 4 days. The deadlines for assignments will be followed. Exceptions may be granted in special situations, but this will be the exception rather than the rule. Those with extenuating circumstances should ask for an extension before the due date.
- **Quizzes:** Quizzes cannot be made up.

FREEDOM IN LEARNING STATEMENT:

Students are responsible for learning the content of any course of study in which they are enrolled. Under Board of Regents and University policy, student academic performance shall be evaluated solely on an academic basis and students should be free to take reasoned exception to the data or views offered in any course of study. It has always been the policy of Dakota State University to allow students to appeal the decisions of faculty, administrative, and staff members and the decisions of institutional committees. Students who believe that an academic evaluation is unrelated to academic standards but is related instead to judgment of their personal opinion or conduct should contact the dean of the college which offers the class to initiate a review of the evaluation.

ADA STATEMENT:

If you have a documented disability and/or anticipate needing accommodations (e.g., non-standard note taking, test modifications) in this course, please arrange to meet with the instructor. Also, please contact Dakota State University's ADA coordinator, Keith Bundy in the Student Development Office located in the Trojan Center Underground or at 256-5121, as soon as possible. The DSU website containing additional information, along with the form to request accommodations is http://www.departments.dsu.edu/disability_services/. You will need to provide documentation of your disability. The ADA coordinator must confirm the need for accommodations before officially authorizing them.

COURSE GOALS:

Chapter Topics

Chapter 1 Introduction to Programming and Visual Basic

- Computer Systems: Hardware and Software
- Programs and Programming Languages
- More about Controls and Programming
- The Programming Process
- The Visual Basic Environment

Chapter 2 Creating Applications with Visual Basic

- Building an Application

- Responding to Events
- Modifying the Text Property with Code
- The AutoSize, BorderStyle, and TextAlign Properties
- Clickable Images
- Using Visual Basic Help
- Debugging an Application

Chapter 3 Input, Variables, Exceptions, and Calculations

- Gathering Text Input
- Variables
- Performing Calculations and Working with Numbers
- Exception Handling
- Formatting Numbers for Output
- Group Boxes and the Load Event Procedure
- Locating Logic Errors

Chapter 4 Making Decisions and Working with Strings

- The Decision Structure
- The If...Then Statement
- The If...Then...Else Statement
- The If...Then...ElseIf Statement
- Nested If Statements
- Logical Operators
- Comparing, Testing, and Working with Strings
- The Message Box
- The Select Case Statement
- Introduction to Input Validation
- Radio Buttons and Check Boxes
- Class-Level Variables

Chapter 5 Lists, Loops, Validation, and More

- Input Boxes
- List Boxes
- Loops: The Do While Loop
- The Do Until and For...Next Loops
- Nested Loops
- Multicolumn List Boxes, Checked List Boxes, and Combo Boxes
- Input Validation
- ToolTips

Chapter 6 Sub Procedures and Functions

- Sub Procedures
- Passing Arguments to Procedures
- Function Procedures

Chapter 7 Multiple Forms, Standard Modules, and Menus

- Multiple Forms
- Standard Modules
- Menus

Chapter 8 Arrays, Timers, and More

- Arrays
- Array Processing
- Sub Procedures and Functions That Work with Arrays
- Multidimensional Arrays
- The Enabled Property, Timer Control, and Splash Screens
- Anchoring and Docking Controls
- Random Numbers

Chapter 9 Files, Printing, and Structures

- Using Files
- The OpenFileDialog, SaveFileDialog, FontDialog, and ColorDialog Controls
- The PrintDocument Control
- Structures

Chapter 10 Working with Databases

- Databases
- Using the DataGridView
- Selecting Dataset Rows
- Data-Bound Controls
- Structured Query Language (SQL)

ACCREDITING AGENCY STANDARDS ADDRESSED IN THE COURSE:

NCATE: Standard #1 Candidate Knowledge, Skills, and dispositions. Candidates preparing to work in schools as teachers or other professional school personnel know and demonstrate the content, pedagogical, and professional knowledge, skills, and dispositions necessary to help all students learn. Assessments indicate that candidates meet professional, state, and institutional standards at professionally acceptable levels.

DECA: 24:16:08:23. 7-12 business education program. A 7-12 business education program shall comply with all standards in general education, professional education, and 7-12 secondary education program requirements, and require coursework sufficient to constitute a major, with at least 50 percent in upper division coursework, which includes the following:

1. Study of accounting, computation, and finance;
2. Study of economics and international business;
3. Study of business law, management, marketing, entrepreneurship education, and interrelationships of business functions, including national policies, ethics, and political thinking;
4. Study of communications and career development;

5. Study of information systems;
6. Study of office technology, including study related to 7-12 program planning and development; and
7. Business-related occupational work-based practicum or internship.

DECA: 24:16:08:35. K-12 educational technology program. A K-12 educational technology education program shall comply with all standards in general education, professional education, and K-12 education program requirements, and require course work sufficient to constitute a major, with 50 percent in upper division coursework, which includes the following:

1. Study in basic educational technology that builds a foundation for using computers and related technologies in educational setting. Content includes:
 - a. Basic computer/technology operations and concepts;
 - b. Personal and professional use of technology; and
 - c. Appropriate use of technology in instruction.
2. Study in basic educational technology that provides concepts and skills preparing teachers to teach applications and use technology to support other content areas. Topics include:
 - a. Social, ethical, and human issues;
 - b. Productivity tools;
 - c. Telecommunications and information access;
 - d. Research, problem solving, and product development;
3. Preparation in educational technology that prepares teachers for integrating teaching methodologies with knowledge about use of technology to support teaching and learning. Content includes:
 - a. Teaching methodology; and
 - b. Hardware/software selection, installation, and maintenance; and
4. Study in educational technology leadership that prepares teachers for exhibiting leadership in the identification, selection, installation, maintenance, and management of computing hardware and software and the uses of computers and related technologies throughout the curriculum. Content includes:
 - a. Research and theories;
 - b. Instructional design and product development;
 - c. Information access and delivery;
 - d. Operating systems; and
 - e. Software/hardware selection, installation, and maintenance.

EVALUATION PROCEDURES:

Grade Composition:

Submission	Quantity	Points per Submission	Total Points	% of Grade
Tests	3	50	150	30%
Assignments	12	25	300	60%
Quizzes	5	10	50	10%
TOTAL	-	-	500	100%

Grading Scale:

Total Points	% Equivalent	Letter Grade
450 to 500	90 - 100%	A
400 to 449	80 - 89.99%	B
350 to 399	70 - 79.99%	C
300 to 349	60 - 69.99%	D
0 to 299	below 60 %	F

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- **Quizzes:** Quizzes cannot be made up.

The class officially ends Friday, December 19, 2008 at 5 PM Central. The last test and all coursework must be completed before that time. No exceptions.

TENTATIVE COURSE OUTLINE:

The instructor reserves the right to make adjustments in the course outline to better meet the needs of the students.

Week	Date	Chapter	Labs	Quizzes	Tests	Due Date
Week 1	09/01/08	Ch 1 Intro to Programming and VB		Quiz 1		09/08/08
Week 2	09/08/08	Ch 2 Creating Applications with VB	Lab 1			09/15/08
Week 3	09/15/08	Ch 3 Input, Variables, and Calculations		Quiz 2		09/22/08
Week 4	09/22/08	Ch 3 Input, Variables, and Calculations	Lab 2			09/29/08
Week 5	09/29/08	Ch 4 Making Decisions and Strings	Lab 3			10/06/08
Week 6	10/06/08	Ch 4 Making Decisions and Strings	Lab 4		Test 1	10/13/08
Week 7	10/13/08	Ch 5 Lists, Loops, Validation, and More	Lab 5	Quiz 3		10/20/08
Week 8	10/20/08	Ch 5 Lists, Loops, Validation, and More	Lab 6			10/27/08
Week 9	10/27/08	Ch 6 Sub Procedures and Functions		Quiz 4		11/03/08
Week 10	11/03/08	Ch 6 Sub Procedures and Functions	Lab 7			11/10/08
Week 11	11/10/08	Ch 7 Multiple Forms, Modules, and Menus	Lab 8		Test 2	11/17/08
Week 12	11/17/08	Ch 8 Arrays, Timers, and More	Lab 9	Quiz 5		11/24/08
Week 13	11/24/08	Ch 9 Files, Printing, and Structures	Lab 10			12/01/08
Week 14	12/01/08	Ch 9 Files, Printing, and Structures	Lab 11			12/08/08
Week 15	12/08/08	Ch 10 Working with Databases	Lab 12			12/15/08
Week 16	12/15/08				Test 3	12/19/08

ADDITIONAL INFORMATION:

Modifications to the Course: The instructor reserves the right to make adjustments to this syllabus during the course of the semester in order to better meet the needs of the students.