CIS 202 Programming and Algorithms I

http://jbwyatt.com   wyattwyatt@gmail.com

PREREQS: None   Joseph Wyatt   142 Becker Hall   mwf 12:00   Spring 2018

OBJECTIVE :

Introduce the fundamentals of algorithm creation and programming. Programming will be done in C# where we will build Windows programs. C# is available for use in the lab. The software can be downloaded free of charge.

Programming can be tedious, time-consuming and frustrating -- it can also be rewarding and fun. I will present material, set goals and evaluate achievement. I will recognize and attempt to match extra effort, but will not shoulder the responsibility for lack of effort. **You** are responsible for your performance.

OUTCOMES :

The successful student will:
>   understand the difference between data and information;
>   understand and create algorithms;
>   create programs based on algorithms;
>   utilize a programming environment such as Microsoft Visual Studio;
>   understand the syntax of a programming language such as C#;
>   understand how computers represent data and instructions;
>   understand the need for variables and demonstrate the use of variables of differing types;
>   understand why conversion of variables is needed and demonstrate the conversion between different types;
>   demonstrate the ability to input data into a program;
>   demonstrate the ability to output information from a program;
>   demonstrate the ability to repeat statements in a loop within a program;
>   demonstrate the ability to make decisions within a program;
>   demonstrate the ability to create separate functions or methods within a program;
>   understand user interfaces and demonstrate the ability to create a graphical user interface;
>   understand and demonstrate how to find and correct errors within a program.

 Outcomes will be assessed through a combination of program creation and traditional testing.

TEXT and MATERIALS: (http://jbwyatt.com/cis202.html)

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“Starting out with Visual C#, 4th ed.” by Tony Gaddis, ISBN: 978-0134382609, 2017
Older editions are okay, CD not needed. A USB flash drive is HIGHLY recommended.
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CONTACT INFORMATION: (http://jbwyatt.com/contact.html)

My E-mail address is: **wyattwyatt@gmail.com**
My Web URL is **http://jbwyatt.com/**

I am acting CIS chair this semester so I may be in my office or the department office. My office is in **141** Becker Hall. The department office is 130 Becker. My office telephone is (814) 393-**2643** and the department office is (814)393-**2442.** Office hours are as posted, but other hours can be arranged.

Topics and coverage is somewhat dynamic and is updated often on the class website. The 42 class semester is divided into halves of approximately 21 classes each.

Part I + -	Part II: + -
A. Introduction to Computing & Programming	E. Making Decisions
B. Introduction to Visual C#	F. Graphics: Panel Drawing Surface, Brushes, Rectangles & Ellipses
C. Processing Data into Information	G. Loops, Files
D. Random Numbers, Tab Controls and Timers	H. Methods
∴ Test1 - Mid Term Exam: M & W	∴ Test 2 - Final Exam

Student is responsible for notes, readings and classroom discussions.   Notes may be changed, emphasized, re-ordered or skipped over. You must earn an "A" or "B" to enroll in CIS 244.

Please defer personal conversations and smalltalk until after class as it annoys other students and bugs the heck out of me.

Copying code is cheating. Allowing others to copy your code is cheating.

You must protect your intellectual property as you protect your personal property - with all reasonable measures.

GRADES: (`http://jbwyatt.com/grades.html`) *Approximately* **1,000 total points**

Grades are determined by your % score: 90+ = A ;   80 – 89 = B ;   70 – 79 = C ;   60 – 69 = D ;   below 60 = E.

Grades are determined as follows:
    ~60%: Tests & Quizzes (~600 points)
        Two tests (make-up **only** with prior notice and excuse). 250-270 points each
        Various quizzes (no make-up).
            In class, announced and unannounced: 5-10 points each
            Quiz point in lieu of points on the next test.
                EX: Five 10 point quizzes before Test 1 means Test 1 will have 50 fewer points.

    ~40%: Assignments (~400 points)
        5 to 7 programs - programs are worth between 25 and 100 points. Late penalties.

While in class you are expected to be attentive and to participate and to take notes. Participation means constructive and informed (by way of doing the assignments and reading) discussion about the subject material.

SPECIAL NEEDS and CONSIDERATIONS:

Any special circumstances that may affect your performance in the class should be brought to my attention. Any student requiring accommodations for taking notes or tests should make arrangements to discuss their needs with me after the first class. Anything that's bothering you may affect your performance in class - please approach me and I'll try to help.