Carolyn England

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Office: BIC1709B

Office Hours: M 9:00 am - 9:50 am, 12:00 pm - 12:50 pm, and

5:00 pm – 5:50 pm

Tu 1:00 pm – 1:50 pm

W 9:00 am - 9:50 am, 12:00 pm - 12:50 pm

Th 5:00 pm – 5:50 pm, 9:00 pm – 9:50 pm F 9:00 am – 10:50 am

e-mail: england@cod.edu

Course Name: CIS 1400 – Programming Logic and Technique

Credit and Contact Hours: 4 semester credit hours (4 lecture hours)

Prerequisites: MATH 0482 – Foundations for College Mathematics II OR

MATH 1115 – Technical Mathematics I OR

qualifying score on mathematics placement test OR

CIS 1400 Sec #002

Location: BIC 1644

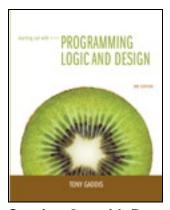
FALL SEMESTER 2012

Monday 6:00 PM - 9:50 PM

qualifying ACT math score OR

consent of instructor

Textbook (Required):



Starting Out with Programming Logic & Design by Tony Gaddis, Publisher: Pearson Education, Third Edition, ISBN-10: 0-13-280545-6, ISBN-13: 978-0-13-280545-2.

Other Course Materials: Note taking material, test taking material (pencil, pen,

eraser, etc.), storage material (USB drive

recommended), assignment submission material

(folder, hardcopies, etc.)

Course Description:

Introduction to computer-based problem-solving. Includes design tools such as structure charts, Input Processing Output (IPO) charts, flowcharts, pseudocode and Object-Oriented Programming (OOP). Concepts such as documentation, structured design and modularity are emphasized. Actual programming experiences are assigned in a procedural level language emphasizing structured design techniques.

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Course Objectives:

Upon successful completion of this course, the student should be able to:

- 1. Identify tools used in designing computer solutions
- 2. Design algorithms to solve both oral and written problems
- 3. Use concepts of structure theorem
- 4. Use arithmetic operations in program solutions
- 5. Use arrays as structures to control memory
- 6. Explain file structure and internal file pointers
- 7. Code, test, and debug computer programs at a procedural level
- 8. Use local and global variable scope in designs and programs
- 9. Use parameter passing between procedures and functions
- 10. Describe OOP methods and techniques
- 11. Describe classes and their components
- 12. Describe event driven programming

Course Requirements:

Academic Honesty:

Course-Related Academic Integrity is one aspect of the Student Code of Conduct. The Student Code of Conduct can be found on page 98 of the College catalog under Student Services and Information:

http://www.cod.edu/catalog/StudentServices_11-13.pdf

Students violating this policy will be processed as indicated in the Student Code of Conduct.

Attendance:

Class attendance and active participation are essential if a student wishes to receive maximum Class attendance and active participation are essential if a student wishes to receive maximum benefit from this class. Material discussed during class and lab times provide the foundation for assignments, quizzes, and exams. Any handouts are given only during the related class/lab; if a student is absent, they will need to obtain the material from a fellow student present during that time. Any additional course policies (not covered in this syllabus) will be discussed during class/lab time and it is the student's responsibility to abide by these policies in order to achieve full credit for coursework completed. Although attendance does help one's final grade, **perfect attendance alone does not guarantee a passing grade**.

e-mail:

Every attempt will be made to answer e-mail on a 24 hour turnaround basis (except for Saturday and Sunday). When sending an e-mail please indicate your name, in which course you are currently enrolled, the problem you are having, and how best to contact you with a resolution.

Exams:

Two (2) exams (MidTerm and Final) are scheduled during the semester. There will be no make-up exams allowed unless there is an emergency and you contact me prior to the scheduled exam date. **NO MAKE-UP EXAMS ARE ALLOWED FOR THE FINAL EXAM!** If a student misses the final exam, he/she will receive a grade that reflects the loss of <u>all</u> points for the final exam.

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Assignments:

Assignments will be handed out in class. Keep track of your scheduled lab time; make sure you have plenty of time to save your work, hand in any material, and take your storage media with you when you leave. Since other classes are probably scheduled for lab time after you, be considerate in cleaning up your area and logging off before their lab time begins. **NO LATE ASSIGNMENTS ALLOWED!** Assignments will be available on Blackboard the Friday **after** distribution during the class meeting time. Students **may** be required to demonstrate the functionality of their assignments to achieve full credit. In the event a student cannot attend class on the day an assignment is due, the assignment should be submitted early unless other arrangements have been made in advance with the instructor.

Satisfactory/Fail/Incomplete:

A Satisfactory/Fail Grading Option must be requested by the **Last Day to Withdraw** (**Tuesday**, **November 13**, **2012**) and requires an overall class grade of 75% or better for a grade of satisfactory. No Incompletes will be given in this course.

The College policy on Incomplete Grades can be found on page 91 of the College catalog under Academic Policies and Procedures:

http://www.cod.edu/catalog/AcademicPolPro_11-13.pdf

Student Responsibilities:

This course involves reading, discussion, online, and written assignments. It is to the student's benefit to use their time wisely whether it is in preparation for class, during scheduled class, or in the lab. Expect to spend time outside of class completing your assignments (anywhere from 4 to 12 hours per week is reasonable). The College of DuPage Academic Computing Labs (http://www.cod.edu/it/labs/) are available for students to complete their college assignments. When a student is in any College of DuPage lab environment (computer resources available), they should abide by the College of DuPage lab policies (turn off all electronic devices, no food or drink, etc.).

Withdrawal Policy:

The last day to withdraw from this class is 11/13/2012. After that date, students may file a Petition for Late Withdrawal through the Registration Office. Petitions for Late Withdrawal will be granted for extenuating circumstances only, including student illness, death in the immediate family, family emergencies, call to active duty, or other appropriate extenuating circumstances. The student will be required to provide appropriate documentation for all requests for Late Withdrawal. Prior to withdrawing from this class, students are encouraged to speak with the instructor.

The College policy on Withdrawals can be found on page 93 of the College catalog under Academic Policies and Procedures:

http://www.cod.edu/catalog/AcademicPolPro 11-13.pdf

Finally:

During class time, considerate conduct by <u>all</u> persons is important to a favorable learning environment. Any infringement on the rights of others to get their education will be dealt with in an appropriate manner. **Electronic devices should be silenced or turned off during class/lab times**. Failure to abide by this policy may adversely affect the student's grade.

Most students sign up for courses with the best intentions; however, circumstances can arise that challenge even the best students. If you are having difficulty with the course, the above requirements, or the College, please come and see me (**before** a crisis develops) so that we can resolve them in a manner beneficial to all persons involved.

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Method of Student Evaluation:

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Lab Assignments	580 pts.
Project Assignment	100 pts.
Exams	
Total Points:	1000 pts.

Final Grades:

Accumulated Points	<u>Grade</u>	
900-1000	A	> 90
800-899.9	B	80 - 89
700-799.9	C	70 - 79
600-699.9	D	60 - 69
599.9 or lower	F	< 60

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Tentative Course Outline/Schedule:

In addition to online resources, material for class lectures/discussion will be taken from the course textbook. Course topics and their corresponding textbook chapters are listed below. To maximize one's mastery of the course material, textbook readings should be done PRIOR to class. This class progresses at a quick pace in order to cover all the objectives; falling behind in one's reading assignments may affect one's comprehension of subsequent topics. For the purpose of maintaining this timely schedule, students experiencing difficulty with any topics should see the instructor for supplemental course instruction during the instructor's office hours. Any revisions to the following schedule will be discussed during class/lab hours.

Week Beginning	Topics and Supporting Textbook Sections	Assignments/Exams
08/20/2012 ** Monday – Semester Begins **	Course Administration and Policies Computers and Programming Productivity = Hardware + Software Ch 1 Introduction to Computers and Programming	Lab #1 handed out
08/27/2012	Simple Data Types and the Sequential Control Structure Ch 2 Input, Processing, and Output	Lab #2 handed out
09/03/2012 **Monday – Labor Day Holiday – No Classes**		
09/10/2012	Understanding Modules Ch 3 Modules	Lab #3 handed out
09/17/2012	Selection Control Structures Ch 4 Decision Structures and Boolean Logic	Lab #4 handed out
09/24/2012	Repetition Logic Structures Ch 5 Repetition Structures	Lab #5 handed out
10/01/2012	Understanding Functions Ch 6 Functions Ch 7 Input Validation	Lab #6 handed out
10/08/2012	Understanding Functions (cont'd)	**MidTerm Exam**
10/15/2012	Advanced Data Types Ch 8 Arrays Ch 12 Text Processing	Lab #7 handed out
10/22/2012	Data Files Ch 10 Files	Lab #8 handed out
10/29/2012	Algorithms Ch 9 Searching and Sorting Arrays	Lab #9 handed out
11/05/2012	Algorithms (cont'd)	

Week Beginning	Topics and Supporting Textbook Sections	Assignments/Exams
11/12/2012	Object Oriented Programming	Lab #10 handed out
	Ch 14 Object Oriented Programming	
11/19/2012	Object Oriented Programming (cont'd)	
**Wednesday – College Open		
(No Classes)**		
**Thursday, Friday		
Thanksgiving Recess**		
11/26/2012	GUI and Event Driven Programming	Lab #11 handed out
	Ch 15 GUI Applications and Event-Driven Programming	
12/03/2012	GUI and Event Driven Programming (cont'd)	
**Saturday – Final Exams and	Class Wrap-Up and Review	
Culminating Activities Start**		
12/10/2012	Scheduled Final Activity	**Final Exam**
Friday – Semester Ends	Monday, December 10, 20012 @ 6:00 pm - 7:50 pm	