GRAYSON COLLEGE

COSC1437

Please Note: Due to extenuating circumstances, including public health issues, course and testing delivery methods, instructional schedules, housing contracts, campus procedures and/or operating hours may be altered, interrupted and/or ceased for a limited or extended period of time. Such changes will be posted on the College website and on your Canvas course.

Course Information
COSC1437 Programming Fundamentals II

Professor Contact Information
Deena White 903-463-8664 whited@grayson.edu
Office Hours – Please send email to request appointment

Course Pre-requisites, Co-requisites, and/or Other Restrictions
'C' or better in COSC1336

Course Description
COSC 1437. Programming Fundamentals II (3-2-4)
This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: 'C' or better in COSC1336. (RM)
The Texas Success Initiative (TSI) is required by Texas law to ensure students enrolled in Texas public colleges possess the academic skills needed to perform effectively in college-level course work. TSI includes a testing component designed to identify and provide diagnostic information about the reading, mathematics and writing skills of each student. This course has been identified as a ***Reading and Math Intensive*** course for the purposes of TSI.

Student Learning Outcomes:

Identify and explain a programming development lifecycle, including planning, analysis, design, development, and maintenance.
Demonstrate a basic understanding of object-oriented programming by using structs and classes in software projects.
Use object-oriented programming techniques to develop executable programs.
Document and format code in a consistent manner.
Apply basic searching and sorting algorithms in software design.
Apply single- and multi-dimensional arrays in software.
Use a symbolic debugger to find and fix runtime and logical errors in software.
Demonstrate a basic understanding of programming methodologies, including object-oriented, structured, and procedural programming.
Describe the phases of program translation from source code to executable code.

COSC 1437 is part of the curriculum leading to an associate degree in the computer programming/analyst discipline. Inherent in COSC 1437 is the development of thinking skills and the application of reading, math, and logic skills.

Required Textbooks and Materials

1. **Textbook:** *Starting Out with C: Early Objects* Gaddis Walters & Mulganda, 10th Edition. IBSN 9780135235003 Please note this is not the brief edition. I do NOT recommend using an e-book (digital) version
2. **Internet Access**
3. **Computer that will run Dev-CPP 5.5.2**

Required Assignments & Academic Calendar

In case of inclement weather, emergency closings, or other unforeseen disruptions to scheduled classes, student must log onto their Canvas accounts for directions on where or how to continue their coursework.

Methods of Evaluation
Grading

A*	90-100%
B	80-89%
C	70-79%
D	65-69%
F	Less than 65%
Exams: **none** dropped	30%
Lab Assignments:	50%
Final Exam	20%

A grade of A requires completion of all assignments as well as an A average in your work.

Grades and feedback be posted on Canvas. If your final attendance drops below 85% a full letter grade will be deducted from your final grade.

Methods of Instruction

Study time will be used for reading and hands-on practice, and self paced laboratory time for one on one instruction and completion of the required lab assignments.

Most classes require at least 10 hours a week in class attendance and self-paced lab time. This does not include time spent on homework or study. This is an on-line class, so class attendance time will be used as self-study. *At least* six hours of lab time and four hours of reading/prep are required each week.

Since your assignments must be submitted on-line, you should allow yourself ample time to submit the assignment before the due date. *An excuse of "I couldn't access the computer to turn in my assignment because . . ." will not gain you any sympathy or extra time.* No pseudocode assignments, exams, quizzes or postings are accepted late for any reason.

Attendance will be calculated based on completion of all work assigned for each due day.

You may not "test out" of this class. If you feel that the course level is below your present abilities, please contact your instructor during the first week of class so you can be enrolled in a more challenging computer science course.

Course & Instructor Policies No late exams or pseudocode labs are accepted for any reason, including problems with your computer, Internet access or Campus problems. Turn in your work ahead of schedule to avoid any problems. Code labs may be turned in up to 1 week late with a 30 point late deduction. Student athletes and students missing classes for school sponsored activities are **REQUIRED** to report absences in advance and make arrangements to turn in all work before the due date, take any missed exams in advance, and obtain class notes from a classmate.
Any assignment or discussion posting that does not use proper capitalization, punctuation, or that uses 'texting' type grammar will be given a grade of 0. Any emails that do not use proper capitalization, punctuation, or that use 'texting' type grammar will not be answered. You are in college and expected to pay attention to your grammar and spelling in all your school work. If you do assignments from your cell phone, make sure you know where the 'shift' key is!
No cell phones are permitted during lecture. Computer monitors should be turned off.
Motivation and effort on the part of the student determines success in class. Here are some guidelines and suggestions for you to follow if you are a new student and want to succeed. Prepare a calendar which lists all test and homework assignment due dates for all classes and consult this calendar daily. Prepare and print your assignments at least two days BEFORE they are due. Review your work before it is due to make sure you haven't left out any answers. Ask questions! If you don't understand something, chances are someone else doesn't either and they're too scared to ask! Turn in all work on time and **read the textbook.** Remember that what you get out of college is directly proportional to the amount of time and effort you put into college.

Class Attendance

Completion and Submission of Assignment 1 by the due date is required in order to be reported as attending the class – regardless of any other work that may be submitted. Being reported as 'not attending' will result in being dropped from the course.
Academic success is closely associated with regular classroom attendance and course participation.
All successful students, whether on campus or online, are expected to be highly self-motivated. All students are required to participate in courses regularly and are obliged to participate in class activities and complete and submit assignments following their professors' instructions.
Students taking courses during compressed semester time frames such as mini-mester, summer sessions, and mid-semester should plan to spend significantly more time per week on the course.
Responsibility for work missed because of illness or school business is placed upon the student. More than two (2) absences are considered to be excessive. If your final attendance grade is less than 85% I will deduct one letter grade from your final score. Tardiness does affect attendance.
Students' eligibility to receive financial aid or live in a College dormitory can be affected by withdrawal from courses. When withdrawal occurs, any tuition refund would be made in accordance with state regulations.
Student athletes and students missing classes for school sponsored activities are **REQUIRED** to report absences in advance and make arrangements to turn in all work before the due date, take any missed exams in advance, and obtain class notes from a classmate.

Attendance will be calculated based on completion of all work assigned for each due day.

THE CASE OF THE "DISAPPEARING STUDENT":
If you find yourself in over your head, please observe the drop dates on the course calendar. You may drop this course by contacting your instructor via Canvas message or email. Please do not "disappear" for two or three weeks and suddenly "reappear" and ask to be given special permission to make up the required work. If you are going to be out of town for any length of time during the semester, let your instructor know via e-mail or in person.

Student Conduct & Discipline
Netiquette Guidelines:

- **Identify yourself:**
  - Begin messages with a salutation and end them with your name.
  - Use a signature (a footer with your identifying information) at the end of a message
- **Include a subject line.** Give a descriptive phrase in the subject line of the message header that tells the topic of the message (not just "Hi, there!").
- **Avoid sarcasm.** People who don't know you may misinterpret its meaning.
- **Respect others' privacy.** Do not quote or forward personal email without the original author's permission.
- **Acknowledge and return messages promptly.**
- **Copy with caution.** Don't copy everyone you know on each message.
- **No spam (a.k.a. junk mail).** Don't contribute to worthless information on the Internet by sending or responding to mass postings of chain letters, rumors, etc.
- **Be concise.** Keep messages concise—about one screen, as a rule of thumb.
- **Use appropriate language:**
  - Avoid coarse, rough, or rude language.
  - Observe good grammar and spelling.
- **Use appropriate emoticons (emotion icons) to help convey meaning.** Use "smiley's" or punctuation such as :-) to convey emotions. See website list of emoticons at http://netlingo.com/smiley.cfm and http://www.robelle.com/smugbook/smiley.html.
- **Use appropriate intensifiers to help convey meaning.**
  - Avoid "flaming" (online "screaming") or sentences typed in all caps.
  - Use asterisks surrounding words to indicate italics used for emphasis (*at last*).
  - Use words in brackets, such as (grin), to show a state of mind.
  - Use common acronyms (e.g., LOL for "laugh out loud").

Please communicate with your instructor via Canvas message. I attempt to read and return messages daily.
Attendance will be taken each face-to-face class meetings and during any required labs. Attendance for Internet courses will be determined weekly based on course activity.
Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance and an attitude that seeks to take full advantage of the educational opportunity.

You are personally responsible for your conduct and achievement in this course. Please be aware of this statement and philosophy and plan accordingly.
No late work is accepted in this class, so please make sure you begin and submit any assignments in plenty of time to deal with any hardware, Internet, or Canvas outages.

Academic Integrity
The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, and the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable.

Any instance of scholastic dishonesty will result in an F in this course and possible referral to the disciplinary committee.

Student Responsibility
You have already made the decision to go to college; now the follow-up decisions on whether to commit to doing the work could very well determine whether you end up working at a good paying job in a field you enjoy or working at minimum wage for the rest of your life. Education involves a partnership that requires both students and instructors to do their parts. By entering into this partnership, you have a responsibility to show up for class, do the assignments and reading, be engaged and pay attention in class, follow directions, and put your best effort into it. You will get out of your experience here exactly what you put into it – nothing more and nothing less.

Title IX
GC policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status.
Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation.
For more information on Title IX, please contact:

- Dr. Molly M. Harris, Title IX Coordinator (903)463-8714
- Ms. Logan Maxwell, Title IX Deputy Coordinator - South Campus (903) 415-2646
- Mr. Mike McBrayer, Title IX Deputy Coordinator - Main Campus (903) 463-8753
- Website: http://www.grayson.edu/campus-life/campus-police/title-ix-policies.html
- GC Police Department: (903) 463-8777- Main Campus) (903-415-2501 - South Campus)
- GC Counseling Center: (903) 463-8730
- For Any On-campus Emergencies: 911

Grayson College is not responsible for illness/injury that occurs during the normal course of classroom/lab/clinical experiences.

These descriptions and timelines are subject to change at the discretion of the Professor.
Grayson College campus-wide student policies may be found on our Current Student Page on our website:
http://grayson.edu/current-students/index.html