South Plains College
Common Course Syllabus: COSC 1437

Department: Mathematics, Engineering, and Computer Science

Discipline: Computer Science

Course Number: COSC 1437

Course Title: Programming Fundamentals II

Available Formats: hybrid

Campuses: Levelland

Course Description: 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: Successful completion with a grade of 'C' or better in COSC 1436

Credit: 4 **Lecture:** 3 **Lab:** 3

Textbook: Starting Out with C++: From Control Structures through Objects, 9th(or 10th) Edition, Tony Gaddis. 2018. ISBN 978-0-13-449837-9. You must have a paper or digital copy of this book. You do NOT need to buy an online access card with this book.

Supplies:

- **Computer:** Access to a laptop or desktop is mandatory for writing and testing lab programs.
- **Transportation:** You must have reliable transportation to attend in-person classes.
- **Software:** You must install **Visual Studio Community** on your home computer. It is free to download from visualstudio.microsoft.com/downloads/.
    - *Note:* You must sign in with your SPC email account to ensure it does not expire after the 30-day trial period. This software is also available on all lab computers.

Students are responsible for ensuring their programming projects are accessible from any location. You are required to use SPC cloud storage, OneDrive, or email your code to yourself to ensure availability. Please note that claiming a lab is complete but inaccessible—due to forgotten files, a forgotten laptop, a forgotten flash drive, or technical oversight—will be treated as an incomplete assignment and will receive a grade of **zero**. All labs must be executed live in front of the instructor, and students must be prepared to explain their code and answer questions regarding their program's logic.

This course partially satisfies a Core Curriculum Requirement: None

Core Curriculum Objectives addressed:

- **Communications skills**—to include effective written, oral and visual communication
- **Critical thinking skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
- **Empirical and quantitative competency skills**—to manipulate and analyze numerical data or observable facts resulting in informed conclusions

Student Learning Outcomes: Upon completion of this course and receiving a passing grade, the student will be able to:

1. Describe the fundamentals of computing infrastructure components: hardware, application software, operating systems, and data communications systems.
2. Delineate and discuss societal issues related to computing, including the guiding principles of professional and ethical behavior.
3. Demonstrate the ability to create and use documents, spreadsheets, presentations and databases in order to communicate and store information as well as to supportproblem solving.
4. Describe the need and ways to maintain security in a computing environment.

Student Learning Outcomes Assessment: A pre- and post-test questions will be used to determine the extent of improvement that the students have gained during the semester

Course Evaluation: There will be departmental final exam questions given by all instructors.

Attendance/Student Engagement Policy: Attendance and engagement are the most critical activities for success in this course. The instructor maintains records of the student's attendance and submission of assignments throughout the semester. The student is expected to attend at least eighty percent (80%) of the **total** class meetings **and** submit at least eighty percent (80%) of the **total** class assignments to have the best chance of success. If the student fails to meet these minimum requirements, the instructor may remove the student from the class with an X, upon their discretion, to help the student from harming their GPA. If the student cannot receive an X, the instructor will assign an F.

Plagiarism violations include, but are not limited to, the following:

1. Turning in a paper that has been purchased, borrowed, or downloaded from another student, an online term paper site, or a mail-order term paper mill;
2. Cutting and pasting together information from books, articles, other papers, or online sites without providing proper documentation;
3. Using direct quotations (three or more words) from a source without showing them to be direct quotations and citing them; or
4. Missing in-text citations.

Cheating violations include, but are not limited to, the following:

1. Obtaining an examination by stealing or collusion;
2. Discovering the content of an examination before it is given;
3. Using an unauthorized source of information (notes, textbook, text messaging, internet, apps) during an examination, quiz, or homework assignment;
4. Entering an office or building to obtain an unfair advantage;
5. Taking an examination for another;
6. Altering grade records;
7. Copying another's work during an examination or on a homework assignment;

8. Rewriting another student's work in Peer Editing so that the writing is no longer the original student's;
9. Taking pictures of a test, test answers, or someone else's paper.

Student Code of Conduct Policy: Any successful learning experience requires mutual respect from the student and the instructor. Neither the instructor nor the student should be subject to others' rude, disruptive, intimidating, aggressive, or demeaning behavior**.** Student conduct that disrupts the learning process or is deemed disrespectful or threatening shall not be tolerated and may lead to disciplinary action and/or removal from class.

South Plains College policies concerning diversity, disabilities, non-discrimination, Title IX Pregnancy Accommodations, and Campus Concealed Carry Statements can be found here: https://www.southplainscollege.edu/syllabusstatements/.

South Plains College policies, return to campus plan, and protocols regarding COVID-19 can be found here: https://www.southplainscollege.edu/emergency/covid19-faq.php.

SPC Tutors
Tutoring is FREE for all currently enrolled students. Make an appointment or drop in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, get to know the tutors, and view tutoring locations.
http://www.southplainscollege.edu/exploreprograms/artsandsciences/teacheredtutoring.php

Online Tutoring
You receive 180 free minutes of Brainfuse tutoring each week, with hours resetting every Monday morning. To access Brainfuse, log in to Blackboard, select Tools from the left-hand menu, and click the Brainfuse link. You will be automatically logged in for free tutoring.
Tutor Availability:

- Monday–Thursday: 8:00 PM – 8:00 AM
- Friday 6:00 PM – Monday 8:00 AM

For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-224

Class Modality Changes Due to College Closure:
If South Plains College is closed due to weather-related conditions or any other unforeseen circumstances, all classes will transition to an online format. Students will be required to complete the assigned coursework remotely and meet all posted deadlines.

AI USE STATEMENT:

Generative AI should be treated strictly as a supplemental learning tool (like a tutor or textbook) and not as a source for content generation. While you may use AI to clarify concepts or debug logic, the direct copying of AI-generated code or text is prohibited. To ensure academic mastery, you must be the sole author of your work and maintain a complete understanding of your logic. At any time, the instructor may require you to modify your code in real-time or answer detailed questions regarding its implementation. If you cannot explain or adapt your code during a live review, it will be assumed the work is not your own, resulting in a grade of zero for the assignment. Violation of academic integrity will result in referral to the Office of Student Conduct.

Lab and Exam Policies

1. **Attendance & Absences**
   - **Mandatory Attendance:** Attendance during in-person sessions is required for the entire class period. Showing up only to demonstrate a lab and then leaving, or leaving before the class ends, will result in a grade of zero for that day's work.
   - **Approved Absences:** Only official college-approved excuses (e.g., a doctor's note or a university-sanctioned event letter) are accepted.
   - **Unexcused Absences:** Personal events—such as family reunions, graduations, out-of-town trips, or pre-purchased airline tickets—are not approved absences. Missing class for these reasons will result in a zero grade for the missed assignment.
   - **Remote Work:** No exams or labs may be taken from home. Moving out of the city or claiming a third party's illness as a reason for absence will not be accepted and will prevent you from completing the course.
2. **Lab Execution & Submission**
   - **Live Demonstration:** All labs must be executed live in front of the instructor. You must be prepared to explain your logic and answer questions about how your program was written.
   - **File Accessibility:** You are responsible for ensuring your code is accessible via SPC OneDrive or email.
   - **No Technical Excuses:** Claiming a lab is finished but inaccessible (e.g., "I forgot my laptop," "I forgot my flash drive," or "I forgot to email the file") will result in a grade of zero.
   - **Incomplete Labs:** If you stay for the entire class period but cannot finish the lab, the instructor *may* grant an extension until the next class period at their discretion.
3. **Exams & Retakes**
   - **Missed Exams due to Illness:** If you miss an exam due to illness, you must take the makeup exam during the same week you return to class, as specified by the date on your doctor's note.
   - **Zero Grades:** Failing to attend class on an exam day or failing to submit work by the deadline will result in a grade of zero.
   - **No Redos:** Once an assignment or exam is submitted/completed, it cannot be redone or retaken under any circumstances.

Note: The instructor reserves the right to modify the course syllabus and policies, as well as notify students of any changes, at any point during the semester.

Instructor Course Information: Fall 2026

Time : T/Th 9:30 AM - 12:00 PM (Tuesdays Face to Face, Thursdays Online)
Course Title: Programming Fundamentals 2
Instructor: Don Pathirage, Ph.D.
Room: Levelland Math Building 125B
Phone: 806-716-2666 (email preferred)
Email: dpathirage@southplainscollege.edu

Office Hours:

Mon (F2F)	Tues (F2F)	Weds (Online)	Thurs (Online)	Friday (Online)
12:00PM-1:00PM	12:00PM-1:00PM 3:45PM -5:00PM	12:00PM-1:00PM	12:00PM-1:00PM 3:45PM-5:00PM	12:00PM-1:30PM Or by appointment

Academic Conduct: You may discuss the lab and programming assignments with your classmates, but you must code, debug, and execute the projects on your own. Copying another student's work or allowing your work to be copied is considered plagiarism and a failing grade for that assignment will be given to all parties involved. Cell phones MUST be turned off and put away during class and testing periods. Calculators will NOT be allowed during exams.

Assignment Policy: Current assignments and due dates will be announced in the class. **Students are expected to read the current chapter before coming to class.** During the scheduled lab, there will be lab exercises to complete and/or programming problems to start. (Programming problems will be finished on your own time). All assignments will be given a Due Date.

Lab exercises must be turned in by the due date; no late assignments will be accepted. **Lab attendance is required, and students are expected to stay for the full lab time. Your work schedule or any other schedules must not overlap with the class schedule.**

Grading Policy: There will be 3 major exams and a comprehensive final. No student will be exempt from the final. Your lab grade will be calculated from homework grades, in-class lab assignments, and programming assignments. Your final grade will be computed as follows:

Major Exams (3):	50%
Final Exam:	20%
Lab Grade:	30%

Please note that the numeric grade scale spans from 100 to 0 and the letter grades will translate to: 100-90 = A, 89 – 80 = B, 79 -70 = C, 69 – 60 = D, 59 – 0 = F. All tests will count towards the final grade, i.e. no exam grades will be "dropped". Only students who miss an exam due to a college-approved absence are eligible to take the makeup exam. (Going out of town, family reunions, vacations, etc.., are not considered approved absences) If you miss an exam, it is your responsibility to contact me as soon as possible using email. If permission is granted for a makeup exam, it needs to be taken before the next class meeting. Missing an exam is a serious matter, and it is up to the student to take the proper action; otherwise, a zero will be assigned as the exam grade. **Your work schedule or any other schedule must not overlap with the class schedule.** When sending an email, please include your course number and section number in the subject line. For example: **COSC1437: [Specify the reason for the contact]**.

Note: Your final grade is determined by the weighted criteria listed above. Please disregard the 'Total' percentage shown in Blackboard, as it may not accurately reflect the final weighting of all assignments.

COSC1437 Fall 2026 Course Outline

This proposed schedule may change as the semester progresses! Always refer to announcements for exact dates.

Week	Topics
1 Aug 25 - Aug 29	Introduction Sections 9.1, 9.2, 9.3, 9.4, 9.5
2 Sep 01 - Sep 05	Sections 9.6, 9.7, 9.8, 9.9 Sections 10.1, 10.2, 10.3, 10.4, 10.5, 10.6
3 Sep 08 - Sep 12	Sections 13.1, 13.2, 13.3. **Homework 1 posted** Sections 13.4, 13.5, 13.6, 13.7, 13.8
4 Sep 15 - Sep 19	Sections 13.9, 13.10, 13.11, 13.12 Sections 13.12, 13.16, 14.1, 14.2
5 Sep 22 - Sep 26	**Exam 1: *(in-person)* (Chapters 9, 10 & 13)** Sections 14.3, 14.4, 14.5. **Homework 1 - Due 09/26**
6 Sep 29 - Oct 03	Sections 14.7, 15.1, 15.2. **Homework 2 posted** Sections 15.3, 15.4, 15.5
7 Oct 06 - Oct 10	Section 15.6 Sections 15.7, 15.8, 16.1
8 Oct 13 - Oct 17	Sections 16.2, 16.3, 16.4 Sections 17.1, 17.2. **Homework 2 – Due 10/17**
9 Oct 20 - Oct 24	**Exam 2: *(in-person)* (Chapters 9, 10 & 13).** **Homework 3 posted** Sections 17.3, 17.4
10 Oct 27 - Oct 31	Sections 18.1, 18.2 – Part 1 Sections 18.2 – Part 2, 18.3, 18.4, 18.5
11 Nov 03 - Nov 07	Section 19.1 Sections 19.2, 19.3, 19.4. **Homework 3 – Due 11/7**
12 Nov 10 - Nov 14	Sections 19.5, 19.6 Sections 20.1, 20.2, 20.3
13 Nov 17 - Nov 21	**Exam 3: *(in-person)* (Chapters 17, 18, & 19)** Sections 20.4, 20.5, 20.6
14 Nov 24 - Nov 28	Sections 21.1, 21.2 - Part 1, 21.2 - Part 2 *Thanksgiving Holiday*
15 Dec 01 - Dec 05	Sections 21.2 - Part 3, 21.2 - Part 4, 21.3
16 Dec 08 - Dec 12	**Final Exams: December 10th at 11:30 a.m. (in-class)**

This proposed schedule may change as the semester progresses! Always refer to announcements for exact dates.