Midland College
COSC 1320
C Programming

Course Description:

Introduces the fundamental concepts of structured programming in the C language. Topics include data types; control structures; functions, structures, arrays, pointers, pointer arithmetic, unions, and files; the mechanics of running, testing, and debugging programs; introduction to programming; and introduction to the historical and social context of computing. Prerequisite: None

Text, References, and Supplies:

CENGAGE UNLIMITED-ACCESS (12 Months), Author: CENGAGE, ISBN: 9780357700044 (This access code includes the eText for the course: Programming Logic & Design, Comprehensive, 9th Edition, Joyce Farrell, Course Technology - Cengage Learning, ISBN-13: 978-1-337-10207-0)

NOTE: You are not required to purchase a printed textbook. However, students can obtain this book through their Cengage Unlimited account for an additional fee.

Student Learning Outcomes (SLO) and Core Competencies:

SLO1. Analyze and explain the behavior of simple programs involving the fundamental programming constructs. Categorize different programming languages and their uses.

SLO2. Modify and expand short programs that use standard conditional and iterative control structures and functions; choose appropriate conditional and iteration constructs for a given programming task.

SLO3. Design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions.

SLO4. Apply the techniques of structured (functional) decomposition to break a program into smaller pieces.

SLO5. Describe the mechanics of parameter passing and demonstrate the difference between call-by-value and call-by-reference parameter passing.

SLO6. Discuss the importance of algorithms in the problem-solving process, identify the necessary properties of good algorithms, and create algorithms for solving simple problems.

SLO7. Use pseudocode or a programming language to implement, test, and debug algorithms for solving simple problems.

SLO8. Discuss the representation and use of primitive data types and built-in data structures. Explain the reasons for using different formats to represent numerical data.

SLO9. Explain basic concepts of secure programming functions. Discuss the properties of good software design.

SLO10. Describe the phases of program translation from source code to executable code and the files produced by these phases; explain the software life cycle and its phases, including the deliverables that are produced.

Student Contribution/ Class Policies:

Students are encouraged to contact the instructor at any time. If you need to meet with the instructor, you will need to make an appoint to guarantee the instructor's availability at a specific time.

Students will be expected to exhibit professional behavior in class. With regard to cell phone use, keep it on silent and do not take calls unless it is an emergency. Texting, social networking, gaming or any other type of cell phone activity is not permitted during class time. Students <u>may not</u> use their cell phones at all while completing exams.

Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. ***Students who do not actively participate in an academically-related activity will be reported as never attended and dropped from the course.***

Students are expected to participate in class regularly. It is the student's responsibility to log into Canvas. All due dates can be found on the course schedule posted in Canvas. Students are expected to behave in a manner that will not interfere with the learning process.

Should you find that you are unable to complete the course, it is necessary for you to contact the Office of Student Services at Midland College and officially drop the class; otherwise a grade of "F" will be given for the semester grade. The policy for student withdrawals is stated in the college Catalog in the [Student Rights & Responsibilities](#) *section. The last day for withdrawal is published in the Midland College catalog and the current course schedule.*

Midland College does not tolerate ***scholastic dishonesty or academic misconduct*** in any form. Please read the [Midland College student handbook](#).

COVID-19 prevention
Students attending face-to-face classes during the fall semester are required to wear face masks and maintain physical distancing at all times while in classrooms and buildings.

Students are encouraged to self-screen for COVID-19 symptoms each day before coming on campus. Students experiencing COVID-19 symptoms should stay home. Students are required to clean their own workspaces before and after each class using products provided by the college.

Grading/ Evaluation of Students:
Upon completion, your performance objective scores will be translated to percentages and the percentages to grades. Assignments will be evaluated and a score assigned. The score will be expressed as a percentage of possible points earned. Percentages are converted to grades and will be assigned as follows:

<60% = F
60% - 69% = D
70% - 79% = C
80% - 89% = B
90% - 100% = A

Quizzes 20%
Lab Assignments.. 50%
Exams 40%

Quizzes/Assignments/Exams

All quizzes/assignments/exams have a due date. No late submissions will be accepted.

Feedback will be given through Canvas within a week of the due date of the assignment.

Course Schedule:

For a tentative schedule of the class material and specific due dates of assignments to be covered, please refer to the schedule provided in Canvas.

Canvas:

It is important for you to log into Canvas every day.

ADA Statement:

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must place documentation on file with the Counselor/Disability Specialist. Students with disabilities should notify Midland College prior to the beginning of each semester. Student Services will provide each student with a letter outlining any reasonable accommodations. The student must present the letter to the instructor at the beginning of the semester. More information can be found at disability services

AMERICANS WITH DISABILITIES ACT

The Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act require that no otherwise qualified person with a disability be denied access to, or the benefits of, or be subjected to discrimination of any program or activity provided by an institution or entity receiving federal financial assistance. It is this Section 504 mandate that has promoted the development of disability support service programs in colleges and universities across the country. Sub-part E of Section 504 deals specifically with this mandate for institutions of higher education.

While it does not require development of special educational programming, for students with disabilities, it does require that an institution (public or private) be prepared to make appropriate academic adjustments and reasonable accommodations to allow the full participation of students with disabilities in the same programs and activities available to non-disabled students. Disabilities may include things such as physical/mobility problems such as paralysis or academic problems like learning disabilities. Some examples of accommodations are extra time for tests, testing in a quiet location, and providing architectural access to buildings.

Non-Discrimination Statement:

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:

Wendy Kane
Dean of Student Life
3600 N. Garfield
Midland, TX 79705
Title9@midland.edu

Natasha Morgan
Human Resources/Payroll Director
3600 N. Garfield, PAD 104
Midland, TX 79705
(432) 685-4534
nmorgan@midland.edu

For further information on notice of non-discrimination, visit
https://www2.ed.gov/about/offices/list/ocr/docs/nondisc.html or call **1 (800) 421-3481**.

Applied Technology Division Information:

Division Dean:	Curt Pervier	143 TC	(432) 685-4677
Department Chair:	Heather Lindley	142 TC	(432) 686-4821
Division Secretary:	Lisa Hays	143 TC	(432) 685-4676

Communication is important! If you have a problem that is interfering with your successful completion of this course, please contact the instructor. Students are encouraged to contact the instructor at any time; however, making an appointment will guarantee the instructor's availability at a specific time.

Allow 48 hours for the instructor to return all calls and emails.