



COP 2220, Programming in C

Week 2 Assignment 1: Circle Calculations (8 points)

First, study chapter 2 in the text and watch my introduction to C video.

Then create a C program called **circle.c** that you will save in your cop2220 folder. The program should do the following:

Ask for a value representing the radius of a circle from the user and store that value in a variable of type double.

Determine the diameter of the circle and print the answer with 1 decimal place after a nice message. Formula for diameter is $2r$ where r is the radius.

Determine the circumference of the circle and print the answer with 1 decimal place after a nice message on the line below the previous message. Formula for circumference is πd where d is the diameter. Use 3.14159 for π .

Determine the area of the circle and print the answer with 1 decimal place after a nice message on the line below the previous message. Formula for area is πr^2 where r is the radius. Use 3.14159 for π .

Note: All formulas are written in algebra and have to be converted to C arithmetic expressions.

Grading Rubric:

Category	Executes correctly	Executes but not correctly	Compiles but does not execute	Does not compile
Code	8	6	4	0