


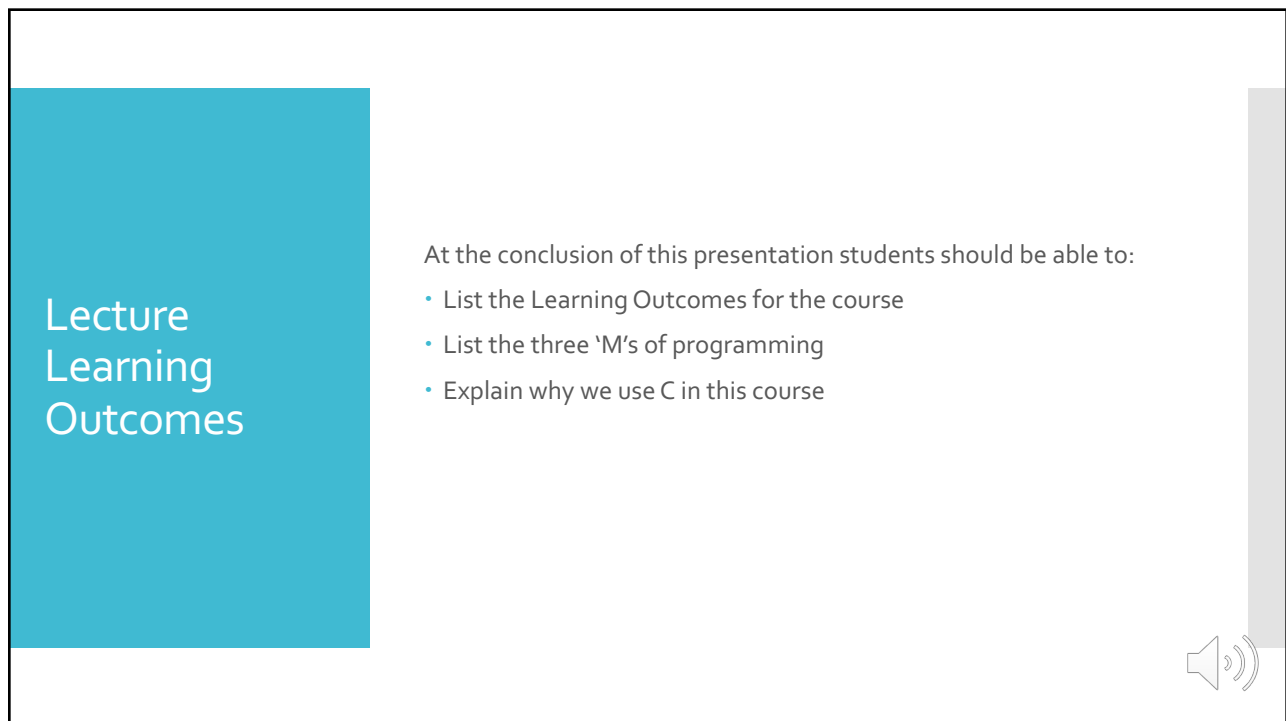

A presentation slide titled "Hello Course" for the course "CS2263 – Systems Software Development". The slide features a large teal rectangle on the right containing the title "Hello Course" in white. Below this, a dark grey rectangle contains the course name "CS2263 – Systems Software Development" in teal. A light grey rectangle is on the left. A speaker icon is in the top left corner, and another is in the bottom right corner.

Hello Course

CS2263 – Systems Software Development



1




A presentation slide titled "Lecture Learning Outcomes". On the left is a teal rectangle with the title "Lecture Learning Outcomes" in white. On the right, the text "At the conclusion of this presentation students should be able to:" is followed by a bulleted list of three items. A light grey rectangle is on the far right. A speaker icon is in the bottom right corner.

Lecture Learning Outcomes

At the conclusion of this presentation students should be able to:

- List the Learning Outcomes for the course
- List the three 'M's of programming
- Explain why we use C in this course



2

Course Learning Outcomes

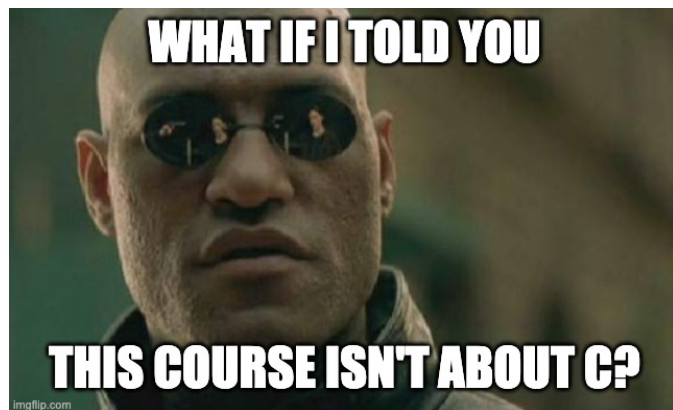
At the conclusion of this course students should be able to:

- Explain how memory is allocated and managed in running programs
- Program using these different memory management methods
- Construct programs of medium complexity that demonstrate these concepts using C
- Explain and use standard tooling in the development process



3

How Can This Be?



4

The Three 'M's of Programming

Memory
emory
emory




5




- The parent of Java
 - C is like Java
 - ~~C is like Java~~
 - Java is like C
- You're already familiar with the syntax



6




- Java abstracts away many basic elements of C
- In C programming, you're working on bare metal
 - What does this mean?
 - Why would anyone do this to themselves?



7

Course Methodology (I)

- Learn C programming (language, toolset, debugging) by implementing algorithms
- Learning different languages improves your understanding of
 - The diversity of languages
 - How memory works
 - Constructs that are not tied to any particular language



8

Course Methodology (II)

- Learn the tools of software development
 - Compiling
 - Debugging
 - Assisted building
 - Version control



9

Course Methodology (III)

- Explore all of this through the lens of memory
 - Kinds of memory available to a process
 - How processes use memory
 - How data is expressed through use of memory



10



forNextDay()

- Read through the Course Syllabus on the LMS
- Research and write a paragraph describing Von Neumann Architecture
- Research and write a paragraph describing the Stored Program Concept

