

Course name	ECE 26400 Advance C Programming
Credit and contact hours	(3 cr.) Class 3
Course coordinator's name	Brian King
Textbook	<i>C Primer Plus</i> , 6 th Ed., by Stephen Prata, Pearson Publishing, 2014, ISBN: 9780321928429
Course information	<p>ECE 26400 Advanced C Programming (3 cr.) Class 3. Continuation of a first programming course. Topics include files, structures, pointers, and the proper use of dynamic data structures. Basic knowledge of the UNIX operating system and an introductory C programming course. C programming knowledge should include basic syntax, control structures, and file I/O, as well as experience in declaring and using functions.</p> <p>Prerequisites/ Co-Requisite P: basic knowledge of the UNIX operating system and introductory to C programming course.</p> <p>Required, Elective, or Selected Elective: EE Elective, CE Elective</p>
Goals for the course	<p>Upon successful completion of the course, students should be able to</p> <ol style="list-style-type: none"> 1. Read and write C programs that use pointers [1,2,6] 2. Read and write C programs that use structures [1,2,6] 3. Read and write C programs that use files [1,2,6] 4. Read and write C programs that use dynamic data structures [1,2,6]
List of topics to be covered	<ol style="list-style-type: none"> 1. Overview of C 2. Data types (simple and structured) 3. The use of pointers 4. Dynamic memory management 5. Linked lists and trees 6. Recursion 7. Binary I/O 8. Random number generation
Syllabi approved by	Brian King
Date of approval	8/27/2021