Instructor
Dr. Timothy Davis
McAdams 303
656-0309
Office hours: TTh 3:00-4:00 (or by appointment)
tdavis2@clemson.edu or tadavis@cs.clemson.edu

Teaching Assistant
Blair Durkee

Class Meeting Times
MTWThF 1:15–2:45 Daniel 415

Course Webpage
http://www.cs.clemson.edu/~tadavis/cs102/

Textbooks
Bruce Eckel, Thinking in C++, Volume 1 (Second Edition), Prentice Hall, 2000 (also available at mindview.net/Books/TICPP/ThinkingInCPP2e.html) (optional).

Goals and Objectives
This course will provide students with foundational principles and practice of coding in C and C++, including data structures, pointers, recursion, and file input/output.

Disability Access
It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities. Students are encouraged to contact Student Disability Services to discuss their individual needs for accommodation.

Grading
Final grades will be based on programming assignments, a midterm test, and a final exam with appropriate weights based on difficulty. Letter grades will be based on a 10-point scale.

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Labs</td>
<td>15%</td>
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<tr>
<td>Projects</td>
<td>50%</td>
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<tr>
<td>Midterm</td>
<td>15%</td>
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<tr>
<td>Final Exam</td>
<td>20% (Friday, June 19, 11:30-2:00)</td>
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Course Guidelines
To be successful in this course, you must follow several guidelines, listed below.

- **Attendance** Attendance is required, but no point deductions will be incurred. Instead, the student is responsible for acquiring class notes for any lectures missed.

- **Labs** The lab TA will set up guidelines for the lab. If you have a problem with anything related to the labs, please see the TA first.

- **Independent Work** You must work on labs and projects independently, unless explicitly stated otherwise. Cheating of any kind will not be tolerated and will result in significant penalties and/or academic integrity charges. Cheating involves any viewing, copying, or discussion of code from other students, whether enrolled in this course or not. Additional clarifications on cheating may also be made during the course of the semester. Please seek help from me only.

- **Class Cancellation** Students are expected to wait for 15 minutes after the scheduled class starting time before leaving if the instructor is late.

Programming Assignments
Programming assignments constitute a significant portion of your grade for the course; therefore, you should spend the majority of your time for this course working on them.

The projects will focus on a ray tracer graphics rendering application. The ray tracer will be implemented across several projects during the semester.

Please note the following project guidelines:

- **Source Code** All programs must be written in C or C++ (as directed in the project specifications) and must compile on the department’s lab computers. A 50% penalty will apply to code that does not compile (or that does nothing). Programs will be submitted using the `handin` command.

- **Deadlines** Deadlines will be enforced, with late work accepted only under extreme circumstances.

- **Style** Please format your code in a readable manner, using the style guidelines from last semester, with additions given this semester.

Course Topics
Possible topics for the course include:

- data structures
- pointers
- recursion
- file I/O
- introduction to C++
- ray tracing application