# ECE 2730: Computer Organization Lab
# Fall 2016


**Course:** ECE 2730 Section 003, 04:30 pm-06:30 pm Monday
**Room:** Riggs 321
**Lab Instructor/TA:** Ravi Prakash Kandury
**Office:** Fluor Daniel 344
**Phone Number:** 864-624-7470
**Email:** rkandur@g.clemson.edu
**Office Hours:** Monday 03:30PM to 04:30PM -- Other times by appointment


**Course Websites:**

http://www.clemson.edu/ces/departments/ece/resources/lab_manuals.html

**Required Materials:**

ECE 2730 Lab Manual. This can be found at the course website above.

**Objectives:**

- Learn how to write simple programs in the assembly language
- Understand the different forms of addressing and how to implement them
- Learn the use of flags, control statements, arrays, and pointers
- Become familiar with subroutines and stack organization

**Grading:**

Attendance is required; please wait for 15 minutes in the event that the instructor is late.
Grades will be kept as follows:
70% Lab Assignments (6) – 15% Lab Quizzes (6) – 15% Lab Final Exam

Assembly Lab Assignment Grading (50 points each):

- CODING (25 points)
  Emailed correctly (5 pts)
  Compiles and Runs (5 pts)
  Correctness (15 pts)
- DOCUMENTATION (25 points)
  Inline Comments and Aesthetics (15 pts)
  Program Header (5 pts)
  Function Header (5 pts)

*NOTE:*
The assembly programs need to be entirely your own work. You should not look into the codes given in the lab manual, though you may wish to consult the theory in the manual for understanding. Please see me during the given office hours or by appointment for clarification. Copied code, either from fellow classmates or from the lab manual, is not acceptable.
All programs should be submitted by email before the beginning of the lab period that the assignment is scheduled due. Submit the commented assembly file using the following naming format:

<Lastname>_2730_<3-DigitSectionNumber>_<1-DigitAssignmentNumber>.s (For example: Raman_2730_001_1.s for the first assignment).

The subject line of the email must be in the following format:

<Lastname>_2730_<3-DigitSectionNumber>_<1-DigitAssignmentNumber> (For example: Raman_2730_001_5 for the fifth assignment).

The assembly file should include the Program Header, any necessary Function Headers, and adequate in-line comments along with the assignment code. See the course lab manual appendix on more details concerning proper header and in-line comment formatting. Strict adherence to the above formats must be followed.

Lab Quizzes and Final Exam

All quizzes and the final exam will be administered in lab using Blackboard.

For the quizzes, you may work together with other students in groups of 2 or 3.

The final exam will be done individually in lab during the last week of classes.

Grade Scale:

90-100 = A; 80-89.99 = B; 70-79.99 = C; 60-69.99 = D; 0-59.99 = F

**Academic Integrity:**

"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a high seminary of learning. Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form."

**Conduct:**

All students are expected to act in a professional manner and to pay attention to the instructor during lectures. Behavior judged by the instructor to be distracting, discourteous, or disruptive will not be tolerated. Prohibited behavior includes, but is not limited to, excessive talking, sleeping, working on homework, reading, and improper use of electronic devices (including laptop computers, cell phones, and personal music players). A student who fails to abide by these standards of conduct will be removed from the course and/or assigned a final grade of F.

**Title IX:**

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at http://www.clemson.edu/campus-life/campus-services/access/title-ix/. Mr. Jerry Knighton is the Clemson University Title IX Coordinator. He also is the Director of Access and Equity. His office is located at 111 Holtzendorff Hall, 864.656.3181 (voice) or 864.565.0899 (TDD).

## Tentative Schedule – Fall 2016 Section 003 *(Monday Sections)*

| Date | In Class | What is Due |
|---|---|---|
| Monday, August 29 | Overview, Login, Lab #1: Introduction to Assembly | |
| Monday, September 5 | Quiz #1 and Lab #2: Simple Assignments | Lab #1 |
| Monday, September 12 | Quiz #2 and Lab #3: Control Statements | Lab #2 |
| Monday, September 19 | Quiz #3 (continue Lab #3) | |
| Monday, September 26 | Lab #4: Addressing Modes, Arrays, and Pointers | Lab #3 |
| Monday, October 3 | Quiz #4 (continue Lab #4) | |
| Monday, October 10 | Lab #5: Stacks and the Subroutine | Lab #4 |
| Monday, October 17 | Spring Break – no lab | |
| Monday, October 24 | Quiz #5 (continue Lab #5) | |
| Monday, October 31 | Lab #6: Subroutine Parameters | Lab #5 |
| Monday, November 7 | Quiz #6 (continue Lab #6) | |
| Monday, November 14 | Catch-up Day/Review for Final | Lab #6 |
| Monday, November 21 | Final Exam | |

The instructor reserves the right to make changes to this syllabus during the semester. Students will be notified by the instructor if any changes are made.