CSCI 352 - Syllabus

INSTRUCTOR AND COURSE INFORMATION

# Instructor Information

Instructor Name: Dr. Andrew Jung

Office Location: Hemenway Hall 514

Email: cjung@framingham.edu

Tel (o): 508-626-4608

Office Hours:

Monday: 11:00 A.M. – 1:00 P.M.

Wednesday: 11:20 A.M. – 12:20 P.M.

Or by appointment.

# Course Information

Course Credits: 1 Credit hours; 4 Lecture Hours

Course Prerequisite: CSCI 271 Data Structures

Required Textbook: David A. Patterson and John L. Hennessy, Computer Organization and Design: The Hardware/Software Interface, Fifth Edition, Morgan Kaufmann, Published September 26, 2013, 800 pages, ISBN 978-0124077263.

Course Description(FSU Catalogue):

An introduction to digital logic components, their organization in computer systems, and assembly language programming. Topics include gates and flip-flops, register transfer, and CPU design; memory organization, I/O interfaces, and the interrupt system; representation of data, addressing modes, CPU instructions and pseudo-instructions, assembly language, and the organization of low-level software to control the computer. Note: Students cannot receive credit for this course if they have taken 63.355 Computer Architecture.

# Learning Objectives:

Upon completion of this course, students will be able to perform, explain, and demonstrate the following learning objectives:

1. Understand and utilize computer architecture terminology.
2. Explain the principles of memory management and peripheral devices management.
3. Understand the mathematical basis and applied principles of hardware design including combinational and sequential logic, transistors, and circuits.
4. Write MIPS Assembly Language programs.
5. Explain computer arithmetic operations.
6. Explain the design of the arithmetic logic unit (ALU) and the processor, datapath, and control.
7. Describe the organization of the central processing unit (CPU) and memory hierarchy.
8. Provide the value of control lines to implement instructions.
9. Demonstrate to create technical documents and to make oral presentations to a range of audience

# COURSE GRADING

## Course Grading:

Final grades evaluations are determined by a weighted average of examinations, assignments, term-paper, and class participation.

### Your final grade in the course will be based on the following:

|  |  |
| --- | --- |
| Examinations (Mid Term and Final Exam) | 45% |
| Assignments (Will give one every class) | 30% |
| Term-paper (Oral Presentation) | 20% |
| Participation (attendance, which is required) | 5% |
| Total | 100% |

### Letter grades are determined as follows:

A 95–100% of the total percentage points possible

A- 90 – 94.9% of the total percentage points possible

B+ 87-89.9% of the total percentage points possible

B 83–86.9% of the total percentage points possible

B- 80-82.9% of the total percentage points possible

C+ 77-79.9% of the total percentage points possible

C 73–76.9% of the total percentage points possible

C- 70-72.9% of the total percentage points possible

D+ 67-69.9% of the total percentage points possible

D 63–67.9% of the total percentage points possible

D- 60-62.9% of the total percentage points possible

F less than 60% of the total percentage points possible

## Term-Paper:

You will complete a 10-15 page research paper on the topic from Computer Architecture of your choosing. You can use double spacing. You must cite at least three references.

# CLASS POLICIES

## I. Late Assignments:

Assignments turned in late due to a documented excused absence will be graded as initially assigned. Late assignments due to unexcused absence will not be accepted.

## II. Retest/Make-up Exam:

A student who misses an original examination may arrange with the instructor for a make-up/retest examination with official document provided. All make-up/retest examinations must be taken within three days of the student’s return to class. Students will earn their full grade on make-ups for documented absences. Students who does not provide official documents may not allow to take test. Quizzes that are missed follow the same rules.

It is the student’s responsibility to see the instructor of the course in order to schedule a retest/make-up examination. The appointment times for retest/make-ups are scheduled at the instructor’s discretion.

## III. Early Exam:

Students may elect to take an exam early due to a conflict. Students must submit official documents to take exam early. Arrangements should be made in advance with the instructor, and the student’s grade will not be affected.

## IV. Attendance:

Students are expected to attend all regularly scheduled class meetings. Students are encouraged to tell their instructor in advance or to call the administrative office if they will be absent.

## V. Electronic Communication/Recording Devices:

To minimize classroom disruptions and protect the integrity of test-taking situations, activated electronic communication devices such as pagers, cellular telephones, and recording devices are not permitted in classrooms at the College unless you have the specific written permission of the instructor. The only exception to this policy will be for on-call emergency personnel (police, fire, EMS), who will be required to notify their instructor of their need for such devices at the beginning of the semester and provide documentation verifying their occupation. However, on-call emergency personnel may not leave a testing situation; communicate by electronic means and return to complete an examination. In these cases, instructors should make arrangements for retesting. Use of personal laptop computers is acceptable during class.

## VI. Students with Disabilities:

“Students with disabilities who request accommodations are to provide Documentation Confirmation from the Office of Academic Support within the first two weeks of class. Academic Support is located in the Center for Academic Support and Advising (CASA). Please call (508) 626-4906 if you have questions or if you need to schedule an appointment.” (See www.framingham.edu/CASA/Accommodations/accomm.htm.)

## VII. Academic Honesty:

All students enrolled in courses at Framingham State University must abide by the University Policy Regarding Academic Honesty, as published in the Framingham State University catalog and the RAM Student handbook. All forms of academic dishonesty, including cheating on exams and plagiarism, are serious offenses and are subject to scrutiny under due process. By logging into Blackboard, you agree to the university Acceptable Use Policy which also covers academic honesty. To become more familiar with this policy click here.

The academic dishonesty in the classroom may result the “F” grade and will report to the school immediately.

## VIII. Submission Policy:

All submissions including assignments, projects, exams, quizzes, and documents must be submit through Blackboard unless the instructor requests hardcopy or through email. Once the due date is past so that the Blackboard is closed, the instructor will not accept anything without permission.