COURSE SYLLABUS

Semester: Spring 2013

Course Prefix/Number: CDA 3101

Course Title: Introduction to Computer Organization (Lecture)

Course Credit Hours: 4.0

Course Meeting Time/Place: TR 9:30-10:45, Bldg 4 / Room 248

Instructor and Contact Information:
  Mr. Jim Lewis
  Office: Building 4, Room 232
  E-mail: jlewis@uwf.edu
  Phone: 850-473-7346

Office Hours: MW 11:00-12:00, TR 10:30-12:00

Course Web Site: http://www.uwf.edu/jlewis

Prerequisites or Co-requisites:
  One programming course
  or MAC 2311 or MAC 2233; CDA 3100 or EEL 3701.
  (Co-requisite – CDA 3101 Laboratory)

Course Description:
  Organization of computing systems. Logical basis of computer structure.
  Machine representation of instructions and data, flow of control, and basic
  machine instructions. Assembly language programming.

Student Learning Outcomes:
  - Solve problems related to computer based number systems.
  - Analyze the role of the internal representation of data in a digital computer.
  - Analyze and design simple combinational and sequential digital logic
    circuits.
  - Describe the components and operation of a microprocessor based
    computer
    system including the processor, memory, bus and I-O systems.
  - Analyze the advantages and disadvantages of several popular computer
    architectures and parallel processors.

Topics Covered:
  - Internal representation of data
  - Introduction to digital design
- Processor design: data path and control unit
- Assembly language programming
- Caching and virtual memory
- I-O systems
- Pipelines
- Introduction to parallel processors

Textbook
Computer Organization and Architecture by Linda Null and Julia Lobur. 2nd or 3rd Edition.

Grading:
Exams (2) – 20% (each)
Final Exam – 25%
Projects – 35%

NOTE: This course has a required laboratory. The 35% designated for projects includes all work done in the laboratory.

Grading Scale:
93%: A, 90%: A-, 87%: B+, 83%: B, 80%: B-, 77%: C+, 73%: C, 70%: C-, 67%: D+, 60%: D, below 60%: F

Expectations for Academic Conduct/Plagiarism Policy:
As members of the University of West Florida, we commit ourselves to honesty. As we strive for excellence in performance, integrity—personal and institutional—is our most precious asset. Honesty in our academic work is vital, and we will not knowingly act in ways which erode that integrity. Accordingly, we pledge not to cheat, nor to tolerate cheating, nor to plagiarize the work of others. We pledge to share community resources in ways that are responsible and that comply with established policies of fairness. Cooperation and competition are means to high achievement and are encouraged. Indeed, cooperation is expected unless our directive is to individual performance. We will compete constructively and professionally for the purpose of stimulating high performance standards. Finally, we accept adherence to this set of expectations for academic conduct as a condition of membership in the UWF academic community.

Any occurrence of academic dishonesty, including all forms of cheating and plagiarism, will be punished by a range of punishments from a grade of zero on the assignment to expulsion from the university. For more information, see the UWF Student Handbook (UWF Student Planner and Handbook).
The Student Code of Conduct sets forth the rules, regulations and expected behavior of students enrolled at the University of West Florida. Violations of any rules, regulations, or behavioral expectations may result in a charge of violating the Student Code of Conduct. It is the student’s responsibility to read the Student Code of Conduct and conduct themselves accordingly. You may access the current Student Code of Conduct at UWF Judicial Affairs.

Assistance:
Students with special needs who require specific examination-related or other course-related accommodations should contact the UWF Office of Disabled Students Services (http://www.uwf.edu/sdrc/ or tel. 850-474-2387). DSS will provide the student with a letter for the instructor that will specify any recommended accommodations.

Other Course Policies:
Attendance: Attendance is not required, but is strongly encouraged. Students are responsible for all announcements and all material covered in class. If you miss a class, please ask a classmate for notes to determine what you have missed.
Exams: Makeup exams will NOT be given except with a serious, documented medical or legal excuse. No make-ups will be given unless students make advance arrangements.
Grades: Final grades will be calculated using a standard grade distribution. The last day of the term for withdrawal from an individual course with an automatic grade of “W” is March 22, 2013. Withdrawals done after that date will result in a grade of “WF” or withdrawal – failing. Applying for an incomplete or “I” grade will be considered only if: (1) there are extenuating circumstances to warrant it, AND (2) you have a passing grade and have completed at least 70% of the course work, AND (3) approval of the department chair.
Participation and Feedback: I encourage active participation and regular feedback. I believe that effective communication between the instructor and students will make the course more useful, interesting, and productive.