# \*Tentative Course Syllabus

(The most updated version of this syllabus will be maintained on the eCollege course shell; students, please refer to that version for most up-to-date information).

# TEXAS A&M UNIVERSITY – COMMERCE ASSEMBLY LANGUAGE/ COMPUTER ORGANIZATION CSCI 241 SPRING 2016

CLASS MEETINGS:	Instructor Office Hours:
Time & Location: Web-based,	I will be responding to your questions on the Virtual Office utility of the
E-College Course Shell will be	e-College course shell and email. Use the Virtual Office utility and post
used:	your questions there.
https://secure.ecollege.com/tamuc	If you email me, put "CSCI 241" in the subject line of your email.
or	
http://online.tamuc.org	

## **INSTRUCTOR**:

Ismail Guneydas Adjunct Faculty, Department of Computer Science Texas A&M University - Commerce e-mail: ismail.guneydas@tamuc.edu

### TEXTBOOK:

Assembly Language for Intel-Based Computers, 7th Edition by Kip R. Irvine, Prentice Hall.

ISBN-13: 978-0133769401

### **COURSE DESCRIPTION:**

Concepts of assembly language and the machine representation of instructions and data of a modern digital computer are presented. Many of the fundamental concepts studied in this course are used to build the framework of a computer science education. Students will have the opportunity to study machine instructions, addressing, stack operations, subroutines, and programmed and interrupt driven I/O. Also, basic concepts of machine organization are studied. This will include computer architecture at the register level and the micro-operation components of instructions. Students will utilize the 80x86 instruction set and will perform programming exercises. **Credit hours: 3. CSCI 151** 

# STUDENT LEARNING OUTCOMES:

Students will demonstrate knowledge of the following:

Outcome #1 Binary numbering systems and conversions; floating point representation

Outcome #2 Concepts of Machine Instructions, Assembly and linking, assembly language programming Outcome #3 Beginning concepts of Computer Organization

Outcome #4 Basic concepts of I/O devices; memory mapped I/O; Interrupts; Arrays, addressing modes and Floating Point Instructions

Outcome #5 Integration of assembly language instructions, machine cycles, and computing organization.

### **COURSE OUTLINE/CONTENT:**

Week 1	Chapter 1. Basic Concepts
Week 2	Chapter 1. Basic Concepts
Week 3	Chapter 2. x86 Processor Architecture
Week 4	Chapter 3. Assembly Language Fundamentals
Week 5	Chapter 4. Data Transfers, Addressing and Arithmetic
Week 6	Chapter 5. Procedures
Week 7	Chapter 6. Conditional Processing
Week 8	Midterm Exam, Online on eCollege
	(Midterm exam ~ this week, covers Chapters 1-6, exact
	time to be announced in eCollege course shell)
Week 9	Chapter 7. Integer Arithmetic- Part I
Week 10	Chapter 7. Integer Arithmetic- Part II
Week 11	Chapter 9. Strings and Arrays
Week 12	Chapter 12 (*Partial Chapter) Floating-point Processing and Instruction Encoding *Only parts of these two chapters will be covered.
Week 13	Chapter 14: 16-Bit MS-DOS Programming
Week 14	Chapter 15 Disk Fundamental
Week 15	Final Exam, Online on eCollege  Covers all chapters covered in the course, exact time to be announced in eCollege course shell)

# **EXAMS & GRADING:**

E-Attendance/E-Activity, E-Participation/Discussions 10% Homeworks Assignments & Pop quizzes 30% Midterm Exam 20% Final Exam (Comprehensive of all the material covered) 40%

# **COURSE REQUIREMENTS:**

**Study:** To plan a minimum of three hours of outside preparation for each hour of class is a safe time allocation for successfully completing the course.

Students are expected to go through the slides and any other uploaded material every week in eCollege course shell. <u>Online discussion/activities may be required</u> and online activities may be assigned to reinforce material in the text. Please see eCollege course shell for further details.

<u>eCollege:</u> You will need to activate and access your eCollege course shell account. Visit <a href="https://secure.ecollege.com/tamuc">https://secure.ecollege.com/tamuc</a> or <a href="https://secure.ecollege.com/tamuc</a> or <a href="https://secure.ecollege.com/tamuc</a> or <a href="https://secure.ecollege.com/tamuc</a> or <a href="https://sec

"If at any time you experience technical problems (e.g., you can't log in to the course, you can't see certain material, etc.) please contact the eCollege HelpDesk, available 24 hours a day, seven days a week. The HelpDesk can be reached by sending an email tohelpdesk@online.tamuc.org or by calling 1-866-656-5511".

Assignments: There will be regularly assigned written problem sets and programming assignments. Assignments will be given and returned via the online eCollege system. It is the student's responsibility to login and check the course's eCollege site at least twice daily for announcements, assignments, quizzes and course-related content. It is very important that students follow the instructions carefully on the assignments. The assignments will be uploaded by the instructor to eCollege course shell. The student may have to upload it to the course shell's Dropbox by following the instructions on the assignment; or the assignments may be entirely online tests. It is the student's responsibility to return or solve all assignments ready on time by the given due date. Late assignment may not be accepted or may be penalized and assignment may not be accepted beyond a certain time.

<u>Popquizzes</u>: There will also be unannounced popquizzes on eCollege. I may upload a quiz and ask you to complete and submit it the very same day. <u>That is another reason why you need to login at least twice daily to the course shell.</u>

**Exams:** Two exams will be given, one midterm exam and one final exam. The instructor may add other necessary exams if he sees necessary. The exams will be delivered online on the dates indicated above.

Attendance/E-participation, Discussions: Student participation will be graded by the level of class participation and attendance. Students are expected to <a href="https://example.com/attendance">attend/participate the weekly discussion topics</a> which will be posted in the course shell almost every week and read all of the uploaded slides which (e-participation). Each student's e-participation time details can be monitored on eCollege by the instructor and the participation of the students in the discussions will also be monitored by the instructor. The <a href="https://example.com/students/students/">students may fail the course</a> if the e-participation is below certain percentage. Students will be able to view their graded assignment, quiz and exam scores on eCollege. The students have one week to inquire about their grade after the assignment/quiz/exam is done. Grades accumulated so far in the class by the students may be provided on eCollege to the students as a courtesy by the instructor so that the students can see where they stand gradewise; however, those grades might not be very accurate. The overall course grades are finalized after all the exams, assignments, quizzes and attendances are complete and then they are put in a spreadsheet, weighed and evaluated at the end of the semester by the instructor.

**Programming assignments:** Programming is a part of this class. Some of the homeworks, quizzes and exams will include programming assignments. Programs will receive a letter grade based on whether he program compiles, executes, and produces the required correct results without any errors. Programs with copied code or other cheating (all or in part) receive grade 0. Students who share their homework or code with others will also receive a grade of 0. A program with extra features, fancy output may receive extra score. A program with sloppy coding or editing, no comments, spacing, etc may have points deducted. The professor reserves the rights to reward students for hard/extra work.

Web-based / online class: This is a web-based / online class. Assignments will be uploaded to eCollege course shell. Students are responsible for obtaining and setting up their eCollege account using their TAMUC student login. They need to follow the eCollege course shell daily for the course announcements, downloading and uploading the assignments, and other course activities. Students also need to check their leomails daily.

The instructor maintains the right to modify the course syllabus & policies within the semester if need arises.

# **ACADEMIC ETHICS:**

"All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedures, Conduct). Ethics include the issue of plagiarism, and copying parts or whole of assignments, quizzes and exams is just as serious as any other type of plagiarism. If you are caught sharing or using other people's work, you will receive a 0 grade and a warning on the first instance. A subsequent instance will result in receiving an F grade for the course, and possible disciplinary proceedings. The student who shares as well as the one who copies will both receive a 0.

# ATTENDANCE POLICY:

Student participation will be graded by the level of class participation and attendance. Since this is a web-based / online class, the students are expected to participate in the required activities as described in the eCollege course shell for each and every week's lecture. At the beginning of every week, reading material / lecture slides will be uploaded to course shell and the students are required to go through the assigned reading material and/or lecture slides. Student's activity is monitored/logged by eCollege in great detail and the participation as logged by the system will also be used as part of your participation grade. \*The student may fail the course if the attendance/participation is below a certain percentage.\*

Any student wishing to withdraw from the course must do so officially as outlined in the class schedule. THE INSTRUCTOR CANNOT DROP OR WITHDRAW ANY STUDENT.

# **COURSE REQUIREMENT DEADLINES:**

Credit will be given for ONLY those exam(s), program(s), and/or project(s) turned in no later than the deadline(s) as announced by the instructor of this class unless prior arrangement has been made with the instructor. Late assignments will be penalized, and the instructor may not accept late assignments after a specified period.

# **METHOD OF EVALUATION (Tentative):**

Final average Letter grade

90 – 100 A 80 – 89.99 B 70 – 79.99 C 60 – 69.99 D Below 60 F

# STUDENTS WITH DISABILITIES REQUIRING ASSISTANCE:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services Texas A&M University-Commerce

Gee Library, Room 132

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

StudentDisabilityServices@tamuc.edu

# **SMOKE, VAPOR & TOBACCO FREE ENVIRONMENT:**

University Procedure 34.05.99.R1 now prohibits the use of vapor/electronic cigarettes, smokeless tobacco, snuff and chewing tobacco inside and adjacent to any building owned, leased, or operated by A&M – Commerce.

UNIVERSITY RULES AND PROCEDURES can be accessed at <a href="http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/">http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/</a> Section 13 is about Students (Academic).