



CS 17: Assembly Language Programming: # 3544

**Instructor:** Howard Stahl

**Session:** Online at online.smc.edu from March 9 – June 7

**Final Exam:** Online via online.smc.edu during the weekend of June 5th

Office: Business 220G

Office Hours: ONGROUND Tuesdays from 10:00 - 11:00AM

Thursdays from 1:00 - 2:00PM

ONLINE Sundays from 7 – 8PM

**Online Office Hours**: Sundays from 7 – 8PM. My YahooIM ID is smc\_stahl **Phone**: (310) 434-8015 (office) (310) 387-4374 (cell)

E-mail: stahl\_howard@smc.edu

# **Course Description:**

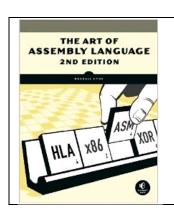
Assembly Language allows the programmer to fully utilize all of the special features of the computer in the most efficient manner. It also aids the high-level language programmer in writing subroutines. The student will write Assembly Language programs and test and debug them.

# **Student Learning Outcomes:**

- 1. Design and create applications using Assembly language for the Intel Pentium architecture and apply the Assembly language for the Pentium architecture to solve specific programming problems.
- 2. Understand how high-level-language concepts such as control flow, looping, conditional statements, procedural abstraction, recursion and arrays are handled by Assembly language instructions.

# **Text/Materials:**

Text:



The Art of Assembly Language by Randall Hyde. No Starch Press. 2<sup>nd</sup> edition. ISBN: 1593272073

A freely available PDF eBook will provided in the course shell online in Canvas

#### **Software:**

You will be using shareware software specifically targeted for Pentium CPU-based computers. To use a Mac, you will need to have an Intel-based Mac that is running MacOS Mojave or earlier. Due to the end of support for 32-bit applications in MacOS Catalina, Macs with the newest operation system version cannot natively run HLA, the software we are using in this class. Students who have upgraded their Macs to Catalina have two choices:

1. Use the Windows computers in the computer lab. I know, I know. It's a major bummer. But this is choice I recommend.

2. Purchase and install Parallels Desktop (\$79.00). This software allows you to create a virtual machine on your Mac where you can run an older version of MacOS. Inside this virtual machine running MacOS Mojave, you will load and run HLA. Due to the cost and the complications, I honestly never recommend Parallels. I would like to strongly encourage Catalina users to use the Business Computer Lab.

It is very important that you acquire and install the software right away to iron out any potential issues with the hardware you intend to use in this class. I have had great success with the software, as students have used it with Linux, Windows 3.1, Windows/Japan and all the other flavors of Windows known to mankind. If you are not all the good with your computer or have a slow connection to the Internet, please consider purchasing a program CD from me, as it will let you work quickly and easily on any computer with a CD-ROM drive. The software can also be installed in a portable fashion using a flash memory drive so that you can work from any computer with an available USB port.

### **Course Format:**

This course is being offered in a online format. We will be covering an entire class in just 12 weeks. As a result, this kind of class format requires a diligent and motivated student. A course website has been created with content, slides and sample code. Be forewarned that this programming class is fairly challenging. As a result, I would like to stress that you work thru each sample coding example provided. In addition to reading the online content, homework will be assigned.

All quizzes and the final exam must be taken online via the course website software. There will be multiple versions of each exam so cheating really will not do you much of any good. For those of you who have not taken a course with me in the past, there is a sample exam online which you can take to familiarize yourself with the course website testing software.

Overall, this kind of course format requires a very diligent, self-motivated learner who can commit to the course schedule and format. With the beginning of class, all the homework assignments have been released, so students can work at their own pace (just please, not any slower than the released calendar at the end of this document...). Students can turn in assignments whenever they choose; however, I will only be grading what is currently due. Exams will be released a few days before their assigned calendar dates.

#### Coursework:

In addition to reading assignments, homework will be assigned. YOU ARE ADVISED THAT THERE IS A SIGNIFICANT READING COMPONENT TO COMPLETING THIS ONLINE CLASS SUCCESSFULLY. Students are also expected to participate in online chats and discussions, as requested by their instructor. Homework is to be submitted by midnight on the due date. LATE HOMEWORK WILL NOT RECEIVE FULL CREDIT.

# **Electronic Submission:**

It is your responsibility to make certain that all files that are submitted electronically can be easily accessed from your submission folder. Following the naming conventions described in class is the best way you can ensure that you receive the highest grades for your assignments. Files that cannot be opened will receive a lower grade. It is very good idea to make a backup copy of your assignments and keep them until the end of the semester!

You must follow the electronic submission guidelines to turn in all programming projects. This course will be making extensive use of the website https://online.smc.edu/login/ldap. You may choose to turn in homeworks there by following the electronic submission guidelines discussed in class. Please monitor that site regularly for important notices and announcements posted online, as mid-course corrections maybe necessary.

# **Course Website:**

All students enrolled in this class have been provided access to a course website. You will find electronic copies of all the information presented and demonstrated in class available for downloading there. While the class has yet to get going, I highly recommend you familiarize yourself with the site and the way I am posting content for your use.

The course website is available from https://online.smc.edu/. Your username is your SMC email address without the @smc.edu portion. Your password is the same one your use for Corsair Connect. All course and lecture content has been made available thru this course website.

# **Evaluation and Grading:**

Assignments: During the semester, a number of assignments which will need to be completed. There will be a total of 12 assignments, many of which will include programming projects. These Assignments need to be turned in on the date scheduled. Only 11 of these problem sets will be considered in your grade, so your lowest homework score will get dropped. YOU WILL BE DROPPED FROM THE CLASS IF YOU FAIL TO TURN IN THREE ASSIGNMENTS. Should you fail to receive full credit on an assignment for some reason, I would like to encourage you to fix your mistake and resubmit your work to get the points back. The non-programming assignments will not be worth as much as the coding assignments. This makes for some confusion because the different assignments in the gradebook will be worth different amounts, but it will work out in the end. Have no fear...

Quizzes:

There will be two quizzes covering reading assignments and programming activities. Each quiz is worth 100 points and both will count toward your final grade. YOU WILL BE DROPPED FROM THE CLASS IF YOU FAIL TO TAKE BOTH QUIZZES. All quizzes will be delivered online via the secure, timed course testing system available from the class website.

Final Exam:

A comprehensive final exam will be given at the end of the semester. It will cover most topics covered during the course. The final exam will be delivered online via the secure, timed course testing system available from the class website.

#### Assessment:

Category	<b>Point Value</b>	Total	Percent
Assignments (12)	various	190	38%
Quizzes (2)	100	200	40%
Final Exam (1)	110	110	22%

<b>Grading Scale</b>		
450-500	A	
400-449	В	
350-399	С	
300-349	D	
0-299	F	

# **Late Policy**

All assignments are due on the scheduled dates. Late work is highly discouraged because you need to keep up with the class to succeed. Unless prior arrangements have been made with the instructor, no late assignments will be accepted.

#### **Honor Code and Code Of Student Conduct**

As a testament to their commitment and readiness to join the Santa Monica College academic community, all students are expected to uphold the Honor Code. At the time of admission, students will certify the following statement:

In the pursuit of the high ideals and rigorous standards of academic life, I commit myself to respect and uphold the Santa Monica College Honor Code, Code of Academic Conduct, and Student Conduct Code. I will conduct myself honorably as a responsible member of the SMC community in all endeavors I pursue.

Honest and ethical students are protected in this class. The SMC Honor Code and Code of Academic Integrity, printed in the General Catalog, remind students of their responsibility to behave honestly and ethically. It is your responsibility to familiarize yourself with these codes. Please be extremely careful that you do not engage in any behavior that could even be construed as cheating. Outside of class, students are allowed to study together. However, copying another student's homework is not acceptable. If I determine that students have relied too heavily on each other in preparing homework or any other project, the students may be assigned no credit. Future occurrences could result in academic disciplinary action.

#### Attendance

Attendance in class is expected and necessary for maximum credit. For an online class, this attendance policy means that students should be logging in to the course website frequently, reviewing the current course content, reading the discussion board and posting on them as needed. Any student who does not login to the course website for two consecutive weeks without having made prior arrangements with the instructor will be dropped from the course.

# **Campus Emotional Support for Students:**

Over the course of the semester you may face difficult circumstances beyond your control, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down or depressed, or having difficulty concentrating. These challenges may create barriers to learning or may make it difficult for you to meet some of the course requirements. If you or someone you know is suffering these or other similarly difficult circumstances, please reach out for support. The staff and faculty of Santa Monica College want you to succeed academically and care about your wellbeing. You may contact the College's Center for Wellness and Wellbeing (LA 110, 310-434-4503), which provides short-term mental health services, community referrals, and a 24/7 emotional support line for students, 800-691-6003. Or, if the situation is an emergency, you may contact the SMC Police Department (310-434-4000 or the SMC LiveSafe app). Please contact me if you want to discuss which SMC service or support might be best for you.

# Cheating

All work you submit must be your own individual work. If you copy another person's work or let another person copy your work, you are cheating. Cases where submitted work looks alike will result in an "F" on the project and will be subject to the student discipline process. The College's Code of Academic Conduct applies to each and every course as well as each and every member of

the academic community, faculty and students alike. IN ORDER TO JOIN THIS SECTION, ALL STUDENTS ARE REQUIRED TO STATE THAT THEY ARE AWARE OF AND WILL FOLLOW THE ACADEMIC HONESTY POLICY. I enforce a ZERO-TOLERANCE policy on cheating in online classes. There is no excuse whatsoever for not doing your own work.

#### Discrimination

Santa Monica College and this academic department welcome students from all over the world with various backgrounds and life experiences. SMC is committed to fostering a safe and productive learning environment. SMC has zero tolerance for discrimination, and/or sexual harassment, which includes sexual misconduct such as, domestic and dating violence, sexual assault, sexual exploitation, and stalking. Any sexual violence or physical abuse, as defined by California law, whether committed by an employee, student, or member of the public, occurring on college-owned or controlled property, at college-sponsored or supervised functions, or related to or arising from college attendance or activity is a violation of District policies and regulations, and is subject to all applicable punishment, including criminal and/or civil prosecution and employee or student discipline procedures.

SMC Students assume an obligation to conduct themselves in a manner compatible with the college's function as an educational institution, which respects the rights of others to learn, and to acknowledge the academic freedom to teach and communicate in an environment that fosters learning and creativity. With that in mind, it is important to keep a respectful tone and attitude when communicating and interacting with your colleagues. You are the only you. No one else will have your sensibilities of what is funny or interesting. Part of being respectful is also realizing that someone else may be offended by something you think is "every day normal."

Students who have experienced some form of sexual misconduct or discrimination are encouraged to talk to someone about their experience, so they can get the support they need. To learn more about support available for students, please see <a href="http://www.smc.edu/StudentServices/SVPE/Pages/What-is-Title-IX.aspx">http://www.smc.edu/StudentServices/SVPE/Pages/What-is-Title-IX.aspx</a>.

# Use of the Discussion Board and Email

The Discussion board in the online course site is intended to facilitate questions and answers. You may post questions as long as you use proper language that is respectful and does not attack any other person in the class. If you abuse the discussion board you will be referred to the school's Disciplinarian. This may also result in further actions taken by the Disciplinarian's office including but not limited to suspension from class.

# **Students with Special Needs**

In compliance with the Americans with Disabilities Act (ADA), all qualified students enrolled in this course are entitled to "reasonable accommodations". Any student who needs special attention should speak privately with the instructor to describe their needs. This should be done within the first two weeks of the start of class.

# **Incomplete Policy**

Students will not be given an incomplete grade in the course without sound reason and documented evidence. In any case, for a student to receive an incomplete, he or she must be passing and have completed a significant portion of the course. Make sure you are aware of the college drop policy. In case of absence, it is your responsibility to find out what material was covered and what assignments were given.

# IT IS YOUR RESPONSIBILITY TO DROP/WITHDRAW FROM CLASS BY THE PUBLISHED DEADLINES OR YOU WILL RECEIVE A GRADE.

In Spring 2020, March 25th is the last day you can drop any 12-week class with and avoid a W on your permanent transcript. You can still drop and receive a W up until May 17th.

# **Tentative Class Schedule**

Below is a tentative schedule and is subject to change. Please do your best to prevent falling behind, as it will become quite difficult to catch up. You are welcome to work faster than this calendar; but not any slower. Just for the record, homeworks turned in early will get graded when they are due. Quizzes will be released on the date list (or maybe a few days earlier, if I am ahead...)

Week Of	Topics	
March 9th	Complete Units 1, 2 and 3	
	Post Homework Solutions For Units 1 and 2 By Sunday, March 15th at midnight	
March 16th	6th Complete Unit 4, 5 and 6	
	Post Homework Solution For Units 4, 5 and 6 By Sunday, March 22nd at midnight	
March 23rd	Complete Unit 7	
	Post Homework Solution By Sunday, March 29th at midnight	
March 25th	Last Day To Drop And Avoid W On Transcript	
March 30th	Complete Unit 8	
	Post Homework Solution By Sunday, April 5th at midnight	
April 6th	Complete Unit 9	
	Post Homework Solution By Sunday, April 12th at midnight	
April 13th	SPRING BREAK : NO CLASS	
April 20th	Quiz 1 Available Online. Quiz 1 Must Be Taken By April 26th at midnight.	
April 27th	Complete Unit 11	
	Post Homework Solution By Sunday, May 3rd at midnight	
May 4th	Complete Unit 12	
	Post Homework Solution By Sunday, May 10th at midnight	
May 11th	Quiz 2 Available Online. Quiz 2 Must Be Taken By May 18th at midnight.	
May 17th	Last Day To Withdraw To Receive W On Your Transcript	
May 18th	Complete Unit 14	
	Post Homework Solution By Sunday, May 24th at midnight	
May 25th	Complete Unit 15	
	Post Homework Solution By Sunday, May 31st at midnight	
May 25th	MEMORIAL DAY : CAMPUS CLOSED	
June 1st	Final Exam Available Online. Final Exam Must Be Taken By June 7th at midnight	