

## **Pulaski Technical College**

##### Course Syllabus

#### **Course CIS 2653-60**

**Computer Organization and Assembly Language**

#### **Spring 2017**

Instructor Information

Name: Dr. Laura Goadrich

Office hours: Tuesday, 5-6pm, IT 106

Mailbox location: Business and Information Technology Division

Email: lgoadrich@pulaskitech.edu

This is an online course. All course correspondence about our course will occur through Pulaski Tech email. I have disabled the Blackboard Course Messaging system to the best of my ability and will not be responding to postings in the Course Messaging. The benefit of using Pulaski Tech email is that your messages will go to my phone and standard email to allow for a quicker response time. I will endeavor to answer your emails within 24 hours during the weekdays.

###### Catalog Description

This course provides an introduction to machine architecture, detailed study of the PC instruction set and addressing modes. Assembling, linking, executing and debugging of assembly language programs are covered. Additional topics include keyboard and screen handling, string processing, interrupts, binary and decimal arithmetic. Prerequisite: CIS 2513. (3 credit hours/special course fee)

**III. Course Resources**Required textbooks:

*Assembly Language for x86 Processors (with Bind-In Access) 7th Ed., Irvine, Pearson, 2014, ISBN: 978-0133769401*

**IV. Institutional Learning Outcomes**

PTC supports a college-wide institutional learning assessment program which concerns effective instructional methods and promotes student learning achievement by assessing:

1. Communication
2. Critical Thinking
3. Cultural Awareness
4. Information Literacy
5. Professionalism
6. Quantitative Literacy
7. Technology Literacy

For more information, please consult the following website : <http://www.pulaskitech.edu/sla/mission.asp>

**V. Department/Program Learning Outcomes**

The Computer Information Systems department, consistent with the College’s mission and the Division’s objectives, encourages the success of its students by providing courses with activities for students to:

1. Assess technology problems and implement the best solutions both independently and as a dependable team member
2. Communicate both in writing and verbally about computing concepts and processes using technical terms effectively to both professional and lay audiences in order to secure and maintain employment.
3. Demonstrate knowledge of mathematics and logical approaches to problem solving in order to analyze a situation and anticipate and prepare for a variety of unknown events that might impact the operation of a computer system or network.
4. Demonstrate technical computing skills to prepare for industry certification or to be technically competent in a particular computing position or job field.
5. Demonstrate safe work habits that reflect concern and care for self and an understanding of the local and global impact of computing on individuals, organizations, and society in the context of sustainability.

**VI. Course Outcomes**

The student will:

1. Successfully use MASM and Visual Studio with the x86 architecture.
2. Gain an understanding of data representation for binary, integer and hexadecimal along with Boolean expressions.
3. Implement assembly language and create programs with data types, operators, addressing, and arithmetic.
4. Create jump and loop instructions including procedures, and conditionals.
5. Conduct successful string and array manipulation.

**VII. Attendance Policy**

Agencies granting financial assistance may be notified of the violation of the attendance policy by students receiving financial aid.

Attendance is taken starting the first day of the semester, with the exception of students who enroll after classes have started. Teachers have the right to count students as absent if they arrive late to class, leave class early, or go in and out of the classroom during class time. Teachers have the right to lower a student’s grade based on excessive absences.

Any student who misses two consecutive weeks of class may be administratively withdrawn from the class.

Any student who does not attend class within the first two weeks of class will be considered a “no show” according to the campus attendance policy and will be reported as such and dropped from the class.

Teachers have the right to enforce PTC’s administrative drop policy for days of consecutive nonattendance.

For our online course, attendance will be taken weekly. According to Pulaski’s catalog:

Students “must demonstrate active engagement and participation in online course activity every seven days or they may be dropped from the course. Simply logging in to the course is not sufficient by itself to demonstrate active course engagement and/or academic attendance.”

For our online class, assignments will be due weekly. Completion of these weekly assignments will constitute attending class. Students who are unable to attend class may request an unavoidable absence to be excused by providing documentation of their absence to their instructor. The instructor will choose to approve or not approve requests for excused absence. Requests for excused absences are to occur via an email to the instructor within one week of the student returning to the course.

**VIII. Classroom Policies**

The PTC Catalogue rules and regulations will be enforced in this class at all times.

Please consult the following website for more information: http://www.pulaskitech.edu/admission/web\_catalog/

Professional behavior is required. Punctual attendance and intelligent participation are expected. Particulars as determined by the instructor are detailed in the paragraph below.

While this is an online class, I expect professional behavior in your posts and interactions with your fellow students and instructor. Make sure that you are familiar with Netiquette (for your reference: <http://www.albion.com/netiquette/book/>).

Appropriate behavior is expected for all communications, including any notes, email messages, or telephone conversations. Some guidelines for communication are included in this syllabus to help you.

**IX. Grading**

Letter grades will be based on the following scale:

|  |  |
| --- | --- |
| 90 to 100% | A |
| 80 to 89% | B |
| 70 to 79% | C |
| 60 to 69% | D |
| 0 to 59% | F |

Course grades will be based on the following:

|  |  |
| --- | --- |
| Discussion Board | 15% |
| Assignments | 40% |
| Quizzes | 30% |
| Final | 15% |
| Total Class | 100% |

While you are always allowed to work ahead, I will not accept late work. The entire course is available to allow you to work ahead at your convenience. If you are aware of any upcoming personal commitments, work ahead. If you are ill and unable to complete an assignment, contact your instructor immediately via email.

**X.**  **Academic Integrity**

It is expected that all students who attend PTC conduct themselves in a manner appropriate for the college experience. Academic integrity is a vital component of collegiate behavior. The PTC catalogue states, “The gaining of knowledge and the practice of honesty go hand-in-hand.”

The catalogue also states, “The responsibility and authority of initiating discipline arising from violations of the rules against dishonesty during the process of the course are vested in the instructor of that course.”

The complete Academic Integrity Policy can be found in the PTC code of conduct.

Plagiarism is not tolerated. All plagiarism will be brought to the attention of the Dean of Business and Information Technology. No credit will be given for plagiarized work.

**XI. Accommodation Policy**

Services for Students with Disabilities: PTC is committed to fulfilling all federal requirements as stated in the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Accommodations are available to students who have documented disabilities. Students who request accommodations must register with the Coordinator of Disability Services in Counseling Services (501-812-2220 or [www.pulaskitech.edu](http://www.pulaskitech.edu/)) prior to the semester of planned enrollment, and must provide recent documentation of medical, educational, and/or psychological records.

Students who need accommodations should inform the instructor at the beginning of the course. Accommodations will only be provided if the instructor receives a letter of approved accommodations from the Coordinator of Disability Services. Failure to provide sufficient notification may result in a delay of services.

**XII. Sexual Misconduct**

No person at Pulaski Technical College will, on the basis of gender, be excluded from participation in, be denied benefits of, or be subjected to sex discrimination, sexual harassment or sexual misconduct under any education program or activity. All college administrative policies and procedures regarding sex discrimination, sexual harassment, and sexual misconduct are in compliance with Title IX. Students who feel they are victims of sexual misconduct should contact the PTC Title IX Deputy Coordinator for Students:

Michelle Anderson, Dean of Students

Campus Center Building Room 212

501-812-2756

[manderson@pulaskitech.edu](mailto:manderson@pulaskitech.edu)

Additional information, including the PTC sexual assault policy, procedures, and resources may be found online at <http://www.pulaskitech.edu/sexual_misconduct_awareness/>.

**XIII. Course Evaluations**

Students may be asked to evaluate their instructor and course near the end of the semester. These student evaluations are very important to the improvement in the quality of instruction and course materials. All results are anonymous and shared with the faculty only after the semester is over and grades have been posted.

**XIV.** **Information Literacy**

PTC is committed to the Information Literacy Competency Standards for Higher Education as established by the Association of College and Research Libraries and endorsed by the National Forum on Information Literacy. Therefore, all courses will incorporate an information literacy component so that, by graduation, all students will be able to recognize the need for information, then locate, evaluate, synthesize, and communicate information in an ethical manner. Information literacy encompasses critical thinking, research, media, technology, health, business, and visual literacy skills to produce lifelong learners who can make informed decisions in the workplace and in their personal lives.

**XV. Course Schedule**

|  |  |
| --- | --- |
| Week | Assignment/Activity |
| 1 | *Preface, Appendix A & Appendix B* |
| 2 | *Basic Concepts: 1.1-1.3* Chapter 1 |
| 3 | *Basic Concepts: 1.4-1.7* Chapter 1 cont. **Quiz- Chapter 1** |
| 4 | *x86 Processor Architecture* Chapter 2 **Quiz- Chapter 2** |
| 5 | *Assembly Language Fundamentals: 3.1-3.3* Chapter 3 |
| 6 | *Assembly Language Fundamentals: 3.4-3.10* Chapter 3 cont. **Quiz- Chapter 3** |
| 7 | *Data Transfers, Addressing and Arithmetic: 4.1-4.3* Chapter 4 |
| 8 | *Data Transfers, Addressing and Arithmetic: 4.4-4.10* Chapter 4 cont. **Quiz- Chapter 4** |
| 9 | *Procedures* Chapter 5 **Quiz- Chapter 5** |
| 10 | **Have a wonderful spring break!** |
| 11 | *Conditional Processing: 6.1-6.3* Chapter 6 |
| 12 | *Conditional Processing: 6.4-6.11* Chapter 6 cont. **Quiz- Chapter 6** |
| 13 | *Integer Arithmetic: 7.1-7.3* Chapter 7 |
| 14 | *Integer Arithmetic: 7.4-7.10* Chapter 7 cont. **Quiz- Chapter 7** |
| 15 | *Strings and Arrays: 9.1-9.3* Chapter 9 |
| 16 | *Strings and Arrays: 9.4-9.5 & 9.7-9.10* Chapter 9 cont. **Quiz- Chapter 9** |

**Final Exam Schedule:**

Your final exam is due Tuesday, May 9th by 11:59pm. The final exam focus on chapters 4-7 & 9, but include all topics listed in the course schedule.

**Disclaimer**: This schedule is a guide for the semester. The instructor reserves the right to amend the schedule as necessary.

**XVI. Course Agreement Form**

Read, complete, and return to instructor*:*

I have read the course syllabus for Laura Goadrich’s CIS 2653 Computer Organization and Assembly Language at Pulaski Technical College, and I understand its content. I also understand the rules for the class, and I will follow and abide by these rules, including those relating to attendance, assignments, grading criteria, plagiarism, and behavior.

Semester \_\_\_\_\_\_\_\_\_\_\_\_\_

Date

Print name

Signature

Email address

(please use your PTC email address)

Telephone

**XVI. Course Agreement Form**

Read, complete, and return to instructor*:*

I have read the course syllabus for Laura Goadrich’s CIS 2903 Linux System Administrators class at Pulaski Technical College, and I understand its content. I also understand the rules for the class, and I will follow and abide by these rules, including those relating to attendance, assignments, grading criteria, plagiarism, and behavior.

Semester \_\_\_\_\_\_\_\_\_\_\_\_\_

Date

Print name

Signature

Email address

(please use your PTC email address)

Telephone