

**COMPSCI 271-01 Fall 2019**  
**Assembly Programming**  
**T 2:00pm-3:15pm R: web based, McGraw 125**  
**Dr. Athula Gunawardena**

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**Office Hours:**

M 1:30pm-2:30pm

T 3:15pm-4:45pm

R 11:30am-2:00pm or by an appointment

**Text:** (Optional) Assembly Programming for the IBM-PC, Kip R. Irvine  
2<sup>nd</sup> edition or later, available on Amazon

<https://www.amazon.com/Assembly-Language-IBM-PC-Kip-Irvine/dp/0023596511>

Emulator used: EMU 8086 Available in McGraw 115, McGraw 125 and McGraw 19 rooms

You may also access it through the virtual lab.

<http://www.uww.edu/icit/services/virtual-lab>

For any help with the virtual lab, please contact the help desk.

<http://www.uww.edu/icit/get-help>

**Prerequisite:**

COMPSCI 172 or COMPSCI 174

**Course Description:**

In this course, students gain knowledge in PC hardware, and in using assembly language, including what needed to write, link and execute a program written in assembly language. Main concepts including the pure automatic formal logic machine, instruction addressing and execution, computer memory, basics of assembly language, linking and running a program will be addressed. In addition, the course examines program logic and control, stack, string and numeric processing.

**Course Content:**

1. Computer Systems: A general overview of computer hardware systems.
2. Mathematical Basis of Computers: Different number systems, computer representation of integers and floating point numbers, arithmetic operations in a binary system.
3. Digital Logic: Boolean algebra, logic gates, simple logic circuits, basic hardware components.
4. 8086-88 Assembly Programming

**Grading Policy:**

Homework	40%
Exam 1	30% October 22, 2019
Exam 2	30% December 3, 2019

Final grade will be determined as follows:

92-100%	89-91.9%	86-88.9%	82-85.9%	79-81.9%	76-78.9%	72-75.9%	69-71.9%	66-68.9%	62-65.9%	59-61.9%	0-58.9%
A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

**COURSE REQUIREMENTS:**

1. Students are expected to attend all classes.
2. All assignments/programs are due at the BEGINNING of the class period on the assigned date. Late assignments or programs will be docked 20% per class day.

**Religious Beliefs Accommodation:**

Board of Regents policy states that students' sincerely held religious beliefs shall be reasonably accommodated with respect to scheduling all examinations and other academic requirements. Students must notify the instructor, within the first three weeks of the beginning classes of the specific days or dates on which they will request accommodation.

**Absence For University Sponsored Events:**

Students will not be academically penalized for missing class (exam) in order to participate in university sanctioned events. They will be provided an opportunity to make up any work that is missed.

**Academic Misconduct:**

No form of academic misconduct will be tolerated in this course. Students engaged in any form of academic misconduct will experience the full force of the law as reported in UWS chapter 14.

**Required Syllabi Statement:**

The University of Wisconsin-Whitewater is dedicated to a safe, supportive and non-discriminatory learning environment. It is the responsibility of all undergraduate and graduate students to familiarize themselves with University policies regarding Special Accommodations, Misconduct, Religious Beliefs Accommodation, Discrimination and Absence for University Sponsored Events. (For details please refer to the Undergraduate and Graduate Timetables; the "Rights and Responsibilities" section of the Undergraduate Bulletin; the Academic Requirements and Policies and the Facilities and Services sections of the Graduate Bulletin; and the "Student Academic Disciplinary Procedures" [UWS Chapter 14]; and the "Student Nonacademic Disciplinary Procedures" [UWS Chapter 17]).

