CURRICULUM

Subject Code and Course Number: CIS 066

Division : Business and Engineering Technology

Course Title : ASSEMBLY LANGUAGE PROGRAMMING

Summarize the need/purpose/reason for this proposal

This course won't be offered anymore.

SLOs (Student Learning Outcomes)

Given a set of logical specifications, students swill be able to create, compile, and run an Assembly Language based application.

Presented with a small Assembly Language program containing one or more syntax errors, students will be able to correct the program for proper syntax.

Presented with a small Assembly Language program containing one or more logical errors, students will be able to find and correct the errors.

SPOs (Student Performance Objectives)

Upon successful completion of this course, the student will be able to...

1. Demonstrate effective use of Assembly language programming including computer organization, data structures and machine instruction sets.

2. Demonstrate an ability to provide basic documentation related to Assembly language programs.

3. Describe internal data representation as it is processed by Assembly language programs.

4. Convert from the decimal number system to the binary, octal, and hexadecimal number systems.

5. Demonstrate a basic knowledge of the operating system commands related to inputting and outputting.

6. Understand the general architecture of the 8088 processor and its related mnemonics.

7. Distinguish between macros and subroutines procedures and their use in program development.

CCOs (Course Content Outline)

I. The Programming Process

II. Internal Data Representation

III. Input/Output Representation

IV. Instruction Sets

V. Comparing and Branching

VI. Arithmetic Operations

VII. Subroutines

VIII. Reading Core Dumps

IX. Programming Assignments

Methods of Instruction

Methods of Evaluation of Student Performance

Assignments

TECHNICAL DETAILS

Catalog Description

Computer organization and data structures; machine instruction sets; macros; subroutines; input/output control system; binary, octal and hexidecimal numbers systems; 8088 assembly mnemonics. Total of 90 hours lecture.
Transfer Credit: CSU; UC
Grade Mode: L, A, P

Prerequisite(s)

CS 002 or CIS 010; and one of the following: CS 010, CS 012, CS 043, CIS 036, CIS 064, CIS 134.

Corequisite(s)

Recommended Preparation

Enrollment Limitations

Instructional Activities associated with TBA

Units : 3.0

CREDIT COURSE OUTLINE

Credit Type : D Credit – Degree Applicable

Maximum Course Units : 0

Minimum Course Units: 0

Computed Total Carnegie Units : 0

Course Unit Totals in Agreement? : No

Course Units Carnegie Compliant by Type and Mode? : Yes

Course Units Carnegie Compliant in Total?: Yes

Total Course Hours by Type and Mode

COURSE HOURS	LECTURE	LAB	ACTIVITY
Scheduled Class Meetings	0	0	0
TBA Hours, Determinate Schedule	0	0	0
***Other Arranged Hours, Variable Schedule**	0	0	0

(*Student is required to meet the same number of arranged hours each day or each week)

Override Computed Course Units if Necessary

COURSE HOURS	LECTURE	LAB	ACTIVITY
Scheduled Class Meetings	0	0	0
TBA Hours, Determinate Schedule	0	0	0
***Other Arranged Hours, Variable Schedule**	0	0	0

Projected Student Registration and Attendance

COURSE ATTENDANCE	
Registration Capacity	0

Projected Census Enrollment [Total]	0
Projected Census Enrollment [Resident]	0
Projected Census Enrollment [NonResident]	0
Projected PA Hours [Total]	0
Projected PA Hours [Resident]	0
Projected PA Hours [NonResident]	0

COURSE VALUES (TOTAL)

	Scheduled Class Hours			Regular TBA Hours			Variable Arranged Hours			
	LEC	**LAB**	**ACTV**	**LEC**	**LAB**	**ACTV**	**LEC**	**LAB**	**ACTV**	**TOTALS**
Course Hours	0	0	0	0	0	0	0	0	0	0
Course Units	0	0	0	0	0	0	0	0	0	0
Load Factor	1	0.75	0.7143	1	0.75	0.7143	1	0.75	0.7143	
LHE	0	0	0	0	0	0	0	0	0	0
FTEF	0	0	0	0	0	0	0	0	0	0

STUDENT AND FACULTY WORKLOADS (WEEKLY, FULL-TERM)

	Scheduled Class Hours			Regular TBA Hours			Variable Arranged Hours			
STUDENTS	**LEC**	**LAB**	**ACTV**	**LEC**	**LAB**	**ACTV**	**LEC**	**LAB**	**ACTV**	**TOTALS**
Instructional Hours	0	0	0	0	0	0	0	0	0	0
Study Hours	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
FACULTY										
Instructional Hours	0	0	0	0	0	0	0	0	0	0
Preparatory Hours	0	0	0	0	0	0	0	0	0	0

Total	0	0	0	0	0	0	0	0	0	0

Repeatability : **Not Repeatable**

The repeatable restrictions apply for Credit Courses do not apply to Non-Credit Courses. Only Non-Credit Courses can be repeated on unlimited number of times.

Reason for Repeatability:

- ☐ Courses for which repetition is necessary to meet major requirements of CSU or UC for completion of a bachelor's degree.
- ☐ Intercollegiate academic or vocational competition
- ☐ Intercollegiate Athletics

Methods of Delivery

- ☐ Face-to-Face
- ☐ On-Line – Primarily taught via Internet
- ☐ Hybrid – Blend of On-Campus and On-Line
- ☐ ITV – Instructional T.V.

Maximum Class Size (NCN)

Minimum Qualifications (Discipline)

COMPUTER APPLICATIONS

Semester of First Offering **Summer 2018**

Defaul Grading Option

B - Course for grade or pass/no pass

Non-Default Grading Option

- ☐ B - Course for grade or pass/no pass
- ☐ E - CE - By Exam
- ☐ U - NG - Non-Graded course
- ☐ N - Non-Credit course
- ☐ P - Course taken for pass/no pass
- ☐ L - Course taken for letter grade only
- ☐ A - Audit

COURSE APPLICABILITY, TRANSFER AND ARTICULATION

Course Credit Status: **D Credit – Degree Applicable**

State Transfer Code:

State Classification Code:

Basic Skills Status/Level:

- ☐ Aligns with C-ID Decriptor

Purpose of Course

- ☐ UC Transferable
- ☐ IGETC Area: Specify Area
- ☐ Gen Ed. Local AA degree: Please specify
- ☐ AA/AS Diversity Requirement in:
  - ☐ Global Studies
  - ☐ Ethnic & Gender Studies
- ☐ Other: Please specify
- ☐ CareerTech Certificate: Indicate name of Certificate(s)

REPRESENTATIVE TEXTBOOKS OR OTHER MATERIALS

Other materials and/or supplies required of students:

Abel: IBM PC Assembler Lang & Programming, 2nd Edition, Prentice-Hall Inc., Publisher, 1991.

RESOURCES & DEPARTMENT PLANNING

Additional Resources Needed:

Facilities Needed to Teach this Course:

Equipment Needed to Teach this Course:

PROGRAM APPLICABILITY

Program Information

- ☐ In an approved program.
- ☐ Part of a new program.

Program Category

- ☐ General Education
- ☐ Career and Technical Education Program

☐ Not part of an approved program. ☐ Noncredit Program

Instructional Methods

☐ Lecture

☐ Lab

☐ Lecture & Lab

☐ Distance Ed / Online Course

☐ Work Experience

☐ Independent Study

☐ TBA

TOP Code Information Program title - TOP Code: **070100 *Information Technology, General**

SAM Code

☐ A - Apprenticeship course (Courses offered to apprentices only.)

☐ B - Advanced occupational (Courses taken in the advanced stages of an occupational program. Each "B" level course must have a "C" level prerequisite in the same program area.)

☑ C - Clearly occupational (Courses taken in the middle stages of an occupational program. Should provide the student with entry-level job skills.)

☐ D - Possibly occupational (Courses taken in the beginning stages of an occupational program.)

☐ E Non-occupational

NON CREDIT ONLY

Funding Category

☐ A English as a Second Language

☐ B Immigrant Education

☐ C Elementary & Secondary Education

☐ D Health & Safety Education

☐ E Education Programs for Persons with Substantial Disabilities

☐ F Parenting Education

☐ G Family & Consumer Sciences

☐ H Education Programs for Older Adults

☐ I Short-term Vocational Programs With High Employment Potential

☐ J Workforce Preparation Enhanced Funding

- [ ] K Other Non-Credit Enhanced Funding
- [ ] L Non-enhanced Funding