

Office of Academic Affairs

Course Information

Course Title: COMP ORGANIZATION & ARCH
Course Number and Section: CPS 2390 W02
Campus Location: WENZHOU-KEAN UNIVERSITY

Semester: 22/FAWZ

Meeting Days and Times: MW 01:00PM - 02:15PM Meeting Location: BLDG: GHKH ROOM: C107

Instructor Information

Instructor Name: Baha Ihnaini Office Location: GHKH C205

Office Hours: MTWTh (2:30 pm – 3:45 pm)

Email: bihnaini@kean.edu

Course Description

Fundamental concepts of Instruction Set Architecture (ISA) and Assembly Language programming as a means of introducing computer architecture. Data representation; logic gates; Central Processing Unit (CPU) and memory organization; the instruction cycle; addressing modes; high and low-level code equivalence from assignments and iteration to subroutine and parameter passing.

Prerequisite(s): CPS 2231 and MATH 2110

Course Level Student Learning Outcomes

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

- · A. Represent the basic data types in a CPU
- B. Utilize Boolean logic and arithmetic operations
- C. Explain the instruction cycle
- D. Develop program in machine code
- E. Describe the assembly process
- F. Implement program in assembly language

Instructional Technique(s)

A. Lectures.

B. Programs or Labs.

Required Textbooks and Materials

Introduction to Computing Systems from bits and gates to C and beyond

Yale N. Patt, Sanjay J. Patel McGraw Hill 2020 3rd Edition

Your <u>Campus bookstore</u> offers a Price Match guarantee. If you find our class texts or access codes cheaper at Booksmart, Barnes & Noble, or Amazon the campus bookstore will match the price at the time of purchase, or for up to 7 days after purchase. Search your course materials by the ISBN provided in this syllabus to assure that your price match is acceptable.

Topics and Assignments

Week	Topics	Chapter
1	Welcome Aboard	Chapter 1
2	Bits, Data Types, and Operations	Chapter 2
3	Digital Logic Structures	Chapter 3
4	Continue - Digital Logic Structures	Chapter 3
5	The Von Neumann Model	Chapter 4
6	National Day (No Class)	
7	The LC-3	Chapter 5
8	Continue - The LC-3	Chapter 5
9	Midterm Exam	
10	Programming	Chapter 6
11	Assembly Language	Chapter 7
12	Continue - Assembly Language	Chapter 7
13	Data Structures	Chapter 8
14	I/O	Chapter 9
15	Final Exam	
16	Presentation	

Important Dates

For important dates, please consult the Academic Calendar via the following link: http://www.wku.edu.cn/en/academics/academic-calendar/

For GE Courses

For GE courses, General Education Student Learning Outcomes (SLOs) need to be assessed. Please refer to your course outline and/or the School of General Studies to see which SLO(s) pertain to your course. The GE SLOs are:

- 1. **Transdisciplinarity**: The ability to integrate knowledge and methods from different fields to address historical or contemporary questions.
- 2. **Critical Thinking**: The ability to utilize reflective analysis to draw informed conclusions.
- 3. **Quantitative Literacy**: The ability to utilize numerical data accurately and effectively to address real world problems.
- 4. **Communication Literacies**: The ability to speak and write effectively to convey and make an evidence- based argument.

- 5. Information and Technology Literacy: The ability to utilize information and communications technology critically and effectively in a rapidly changing world.
- 6. Active Citizenship: A commitment to lifelong civic engagement at a local, national and/or global level.
- 7. Ethical Judgment and Integrity: The ability to draw reasonable conclusions from ethical questions to guide personal conduct.
- 8. **Diversity**: A commitment to promote inclusivity in a diverse world.

For further information on General Education Student Learning Outcomes, see https://www.kean.edu/academics/college-liberal-arts/school-general-studies/general-educationprogram-assessment

Assessment

Participation and Attendance: 5%

Assignments: 25%

Quizzes: 10%

Project and Presentation: 10%

Mid-Term Exam: 25%

Final Exam: 25%

Academic Early Alert

Academic Early Alert information will be provided to students by the instructor via Advise. Please see the 2021-2022 Undergraduate or Graduate Catalog for more information.

Course Policies

Provide Course Policies, if necessary, such as participation, etc. in addition to the following:

<u>Class Recordings (Live Sessions/Collaborate)- if applicable</u>

In this class software may be used to record live class discussions. As a student in this class, your participation in live class discussions will be recorded. These recordings will be made available only to students enrolled in the class, to assist those who cannot attend the live session or to serve as a

resource for those who would like to review content that was presented. All recordings will become unavailable to students in the class when the course is closed.

Students are not permitted to record (or download) the course experience. If a recording of the course is required for accommodation purposes students must make those arrangements with the Office of Accessibility Services. Students found to have recorded (or downloaded) course experiences without authorization are subject to review by the Office of Student Conduct and Community Standards.

Privacy Statement

Assuring privacy among faculty and students engaged in online instructional activities helps promote open and robust conversations and mitigates concerns that comments made within the context of the class will be shared beyond the classroom. As such, recordings of instructional activities occurring in online classes may be used solely for internal class purposes by the faculty member and students registered for the course, and only during the period in which the course is offered.

Policies

Students are responsible to review and understand the *University Academic Integrity Policy* available at https://www.kean.edu/academic-integrity

Instructors must indicate on the syllabus and/or individual assignment if the use of Wenzhou-Kean University academic support services (Tutoring and/or Writing Center of English Language Center) is permitted for take home assignments/exams.

Students are welcome to contact English Language Center (ELC) via <u>elc@wku.edu.cn</u> for inquiries and questions of receiving assistance with English. Faculty are encouraged to refer students who need assistance to ELC by sending emails to <u>hexiaolu@wku.edu.cn</u>.

Online 1-1 Peer Tutoring Service is available. Students can log in MY WKU account > Choose Resource Booking >Book Course Tutoring / preferred tutor. Students shall book services 24 hours in advance and cannot exceed 4 hours per month. Course list with tutors' availability will be sent to all students by email. In addition, Course Group Tutoring Service is available to support students who enroll in historically more challenging courses. Detailed information will be sent to students by email during the semester. Students are welcome to contact Student Academic Support Service Center via email at sassc@wku.edu.cn or via QQ 2564392014 for more information.

Students should review the *Student Code of Conduct*, as it discusses expectations of appropriate conduct in the classroom: http://www.wku.edu.cn/en/org/student-affairs/code-of-conduct/

All students must have a valid Kean email account. For those who do not already have one, please contact the Office of the Registrar via phone 0577-55870166 or by email registrar@wku.edu.cn. If you

forgot your password or have a problem of logging in your email account or Blackboard, please contact the Office of Computer and Information Service (OCIS) via ithelpdesk@wku.edu.cn.

Intellectual Property Policy

Public posting of course materials from this class is prohibited. Materials presented in the classroom are for the personal use of registered students during the semester only. Homework, programs, and other classwork should not be shared, distributed or publicized in any way, for the protection of other students and in respect of the intellectual property rights of the faculty and copyright owners. Kean University's Academic Integrity Policy can be found here: https://www.kean.edu/media/academic-integrity-policy

Diversity & Non-Discrimination Statement:

Wenzhou-Kean University is committed to establishing and maintaining a diverse campus community through inclusive excellence and equal opportunity. Wenzhou-Kean's commitment to access and equity is designed to prepare each graduate to not only thrive, but climb higher in a diverse world. As an affirmative action, equal opportunity institution we work to support a campus-wide agenda to foster a community that both values and promotes the diversity and equity of all students, faculty, staff, administrators, and beyond.

Students with Disabilities Statement

Students with documented disabilities who may need instructional accommodations or special arrangements in the event of an evacuation should notify the instructor as soon as possible and no later than the second week of the term. Students may also contact Ms. Zhenzhen XIA at the Office of the Vice Chancellor for Student Affairs (General Education Hall, A219) by phone at 0577-55870153 or email vcsa@wku.edu.cn to discuss special needs, accommodations and arrangements.

Title IX

Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination on the basis of sex in education programs or activities. Sexual harassment in any form will not be tolerated at Kean University. Sexual harassment by students should be reported to the Office of Affirmative Action Programs, Office of the Vice President for Student Affairs or the Office of Community Standards and Student Conduct immediately. Information about the University's Sexual Misconduct Policy may be found at the following: https://www.kean.edu/offices/policies/sexual-misconduct-policy. Student may contact Dr. Shuli XU (shulix@wku.edu.cn), the Title IX contact person at WKU.