CTC 495 – 35 Selected Topics: Information Technology Fundamentals

Computer Science Department
California State University, Dominguez Hills

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Dr. Liudong “Louis” Zuo (Ph.D.)</th>
<th>Prerequisites</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email</td>
<td><a href="mailto:LZUO@csudh.edu">LZUO@csudh.edu</a></td>
<td>Lecture Delivery Method</td>
<td>Online</td>
</tr>
<tr>
<td>Friday Classes</td>
<td>Synchronized (Zoom Meeting)</td>
<td>Saturday Classes</td>
<td>Asynchronized</td>
</tr>
<tr>
<td>Office Hours</td>
<td>3:50 PM – 5:20 PM on Tu and Th</td>
<td>Unit</td>
<td>2</td>
</tr>
</tbody>
</table>

More Information

- **CTC 495 Class Series**: This is the first section of CTC 495 class series (three sections in total), the other two sections (CTC 495 – 36 and CTC 495 – 37) will be taught by different instructors.

- **Office Hours**: Whenever you have questions, the best way to contact me and seek help is to send your questions to my email address. I will reply to your email ASAP. If you would like to talk to me via Zoom, please contact me via email and then we can set up an appointment.

- **Credit/No Credit Grading Option**: If you have concern over your performance in this class, I recommend that you request to make this class as “CREDIT/NO CREDIT” by filling [this form](#) which will not hurt your GPA if you receive “NO CREDIT”. After you fill in this form, please send the filled form (digitally or scanned copy) to me for signature. Note that deadline for submitting this form to Office of Admissions and Records (WH 290) is **Sep. 21**.

- **More Deadlines**: Please refer to [university academic calendar](#) for more important deadlines.

Course Reference

Following book is a recommended reference book, purchasing is not mandatory.

Author: Tony Gaddis, Publisher: Pearson (March 16, 2017)

Course Description

Due to the wide-spread usage of computer applications, knowledge about computers and information technology is required to function effectively in the workforce today. This course provides students with training related to information technology, computer networks and cybersecurity. Students who enroll and complete the course would gain significant theoretical knowledge and hands-on experience that can be transformed into marketable skill sets that potential employers are looking for. Topics of this course are divided into three modules: Information Technology Fundamentals, Networking & Hardware, and Cybersecurity Computer Security. We will cover the first module in this course.

Course Objectives

- Introduce basic knowledge of the following topics: Programming, Data Analysis, Probability and Statistics, Batch Scripts, Database, Operating System, and Network and Network Security.

- Get students familiar with using computers and learned knowledge to solve real problems.
• Generalize the topics, techniques and tools to show students the concepts and essence, and further let students use similar concepts and essence in their future study to solve problems.

**Student Learning Outcomes**

Upon completion of the course the students will be able to

• write simple Python programs to solve problems.

• use Excel to manipulate data.

• answer entry level questions regarding Database, Operating System, and Network and Network Security.

• apply learned computational thinking skills for problem solving

**Grading and Course Requirements**

Quiz: 20%, Assignment: 40%, Exam: 40%

• **Quizzes**: There will be two quizzes, and will be held online.

• **Assignments**: There will be four assignments.

• **Exam**: The final exam is cumulative, and will be held online (90 mins long).

**Other Policies**

• You are required to attend all zoom meetings, and read and study the lecture notes.

• No makeup will be given to quizzes and exams except for medical reasons. Medical note with doctor’s signature is required for a make up.

• Extra credits, if there is, will be available to all students to earn.

• You are strongly encouraged to ask questions when you have any. However, try your best (and help yourself first) before asking me for help. For example, if you ask me a question about a problem in an assignment and I notice that you have barely made any effort to solve it, I will not offer much help.

**Grading Scale**

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
<th>Score Range</th>
<th>Grade</th>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 95</td>
<td>A</td>
<td>[90, 95)</td>
<td>A−</td>
<td>[86, 90)</td>
<td>B+</td>
</tr>
<tr>
<td>[82, 86)</td>
<td>B</td>
<td>[78, 82)</td>
<td>B−</td>
<td>[74, 78)</td>
<td>C+</td>
</tr>
<tr>
<td>[70, 74)</td>
<td>C</td>
<td>[66, 70)</td>
<td>C−</td>
<td>[62, 66)</td>
<td>D+</td>
</tr>
<tr>
<td>[58, 62)</td>
<td>D</td>
<td>[0, 58)</td>
<td>F</td>
<td>NA</td>
<td></td>
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</tbody>
</table>

**Required Computer Software/Hardware Capabilities**

• **Computer**

You must have access to a reliable computer for this course. If you are on campus and do not have a laptop, you can check out a laptop from the IT User Services Help Desk via [Technology Checkout Program](#). In addition, the [Toro Student Computer Lab](#) offers on campus access to workstations with a wide variety of commonly used software.
Visit the CSUDH Online Courses Technical Requirements page for more information on technology requirements.

- **Zoom**
  
  This course will use Zoom web conferencing software for online meetings/office hours/online lectures. Visit this page for detailed information of using Zoom.

- **Email**
  
  All email communications from this course will go through your Toromail, the CSUDH student email system.

- **Internet and Campus Wireless Network**
  
  You must have Internet access to participate in this course. If you are on campus, connect your laptop and mobile device to the internet using the eduroam campus wireless network.

- **Technical Help and Any Other Questions**

  - **Login Issues**
    
    For login issues related to Blackboard, Toromail and MyCSUDH, contact the IT Help Desk at 310-243-2500, option 1. You can also create an online service ticket for login support.
    
    The IT Help Desk also offers walk-in support. Visit the first floor of the library (north), C-108, for in-person help.

  - **Password Resets**
    
    CSUDH offers an easy, self-service password reset service. For additional assistance, contact IT Help Desk.

  - **Blackboard Issues**
    
    For issues or questions with Blackboard, contact the CSUDH Blackboard Support line at 310-243-2500, option 2.
    
    You can also create an online service ticket for Blackboard support.

  - **Any Other Questions**
    
    If you have any other questions or need technical help, please visit Division of Information Technology page.

**Computer Literacy Skills Expectations**

Students are required to have the following basic computer literacy skills to succeed in this course, especially considering this is a hybrid course:

- Have regular access to computers and internet access for the term of this course.

- Be able to access online course materials on Blackboard using common internet browsers, such as Chrome and Firefox.

- Be familiar with using email as a communication tool and check your campus email account at least every other day.

- Be able to open the materials and finish the required problems using applications, such as Eclipse or other Java IDEs, PowerPoint reader, Word reader and PDF reader.

**Academic Integrity**

Academic integrity is of central importance in this and every other course at CSUDH. You are obliged to consult the appropriate sections of the University Catalog and obey all rules and regulations imposed by the University relevant to its lawful missions, processes, and functions. All work turned in by a student for a grade must be the students’ own work. Plagiarism and cheating (e.g. stealing or copying the work of others and turning it in as your own) will not be tolerated, and will be dealt
with according to University policy. The consequences for being caught plagiarizing or cheating range from a minimum of a zero grade for the work you plagiarized or cheated on, to being dropped from the course.

**Americans with Disabilities Act**

Access to publications, instructional material, computer software, hardware and electronic information, as well as access to the campus are critical for the educational and career achievement of all persons. CSUDH seeks to enable that access with this directory of information and services. The policy of the CSU is to make its programs, services, and activities accessible to students, faculty, staff, and the general public who visit or attend a campus-sponsored event, with disabilities.

CSUDH adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with temporary and permanent disabilities. If you have a disability that may adversely affect your work in this class, I encourage you to register with Student disAbility Resource Center (SdRC) at Welch Hall, Room D-180 and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. **NOTE:** no accommodation can be made until you register with the SdRC. For information, call (310) 243-3660 or Email dss@csudh.edu or go to: [https://www.csudh.edu/sdrc/](https://www.csudh.edu/sdrc/)

**Netiquette**

Just as respectful conversational techniques are expected in an on campus classroom, proper netiquette is important when taking an online class. Please remember that using the written word as we do in an online class can be difficult since we don’t have facial expressions or body language to aid us in understanding what you are saying. Good online resources for you to check out are: [http://www.albion.com/netiquette/](http://www.albion.com/netiquette/)

**Behavioral Standards**

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students’ ability to learn and an instructor’s ability to teach. The instructor may require a student responsible for disruptive behavior to leave class pending discussion and resolution of the problem and may also report a disruptive student to the Student Affairs Office (WH A-410, 310-243-3784) for disciplinary action.

**Instructor’s Rights**

An instructor has the right to remove a student from class at any time he/she considers a students actions to be interfering with a proper collegiate environment. The instructor may also refer the incident to the Director of Student Discipline & Student Life for disciplinary action as warranted.

**Tentative Course Outline and Schedule**

Note that the dates in the table are tentative, the actual topics covered on certain dates might be different and will be depending on the class progress. All the course materials can be found on Blackboard. Students are supposed to read the assigned course materials carefully during each online class time, other instructions might be specified by instructor, which will be announced in class or sent to students via email.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Coverage</th>
<th>Quiz/Assignment/Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Friday (8/28)</td>
<td>Chapter 1 Introduction to Computers and Programming, Chapter 2 Input, Processing, and Output</td>
<td>Assignment 1</td>
</tr>
<tr>
<td></td>
<td>Saturday (8/29)</td>
<td>Using and Handling Data, Excel Tutorials</td>
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</tr>
<tr>
<td>2</td>
<td>Friday (9/4)</td>
<td>Chapter 2 Input, Processing, and Output, Chapter 3 Decision Structures and Boolean Logic</td>
<td>Assignment 2</td>
</tr>
<tr>
<td></td>
<td>Saturday (9/5)</td>
<td>Database and SQL Basics</td>
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</tr>
<tr>
<td>3</td>
<td>Friday (9/11)</td>
<td>Chapter 3 Decision Structures and Boolean Logic, Chapter 4 Repetition Structures</td>
<td>Quiz 1, Assignment 3</td>
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<tr>
<td></td>
<td>Saturday (9/12)</td>
<td>Operating System Basics</td>
<td></td>
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<tr>
<td>4</td>
<td>Friday (9/18)</td>
<td>Chapter 4 Repetition Structures, Chapter 5 Functions</td>
<td>Quiz 2, Assignment 4</td>
</tr>
<tr>
<td></td>
<td>Saturday (9/19)</td>
<td>Network and Security Basics</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Friday (9/25)</td>
<td>Chapter 7 Lists and Tuples</td>
<td>Exam</td>
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</table>