CTC/ITC 399 – IT Practicum
Fall 2020

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Classroom	Online	Class Time	Friday 9:30AM - 11:30AM
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COURSE DESCRIPTION:
The technology internship program allows students to gain "hands on "experience in a technology environment by spending one semester as an intern in the Information Technology Department. The Internship program provides students with the opportunity to gain technical experience related to their studies, and to prepare for future career opportunities.

PRE-REQUISITE: Junior standing and consent of instructor.

TEXTBOOK: None

COURSE GOALS:
- Provide "hands-on" technical knowledge and expertise to the students.
- Prepare the students with technical skills that enhance their abilities to obtain a career in Information Technology.
- Enhance communication, team building, and time management skills.

COURSE OUTCOMES:
Upon completion of the course the students will be able to:
- Demonstrate a general understanding of how an IT lab functions.
- Demonstrate a basic knowledge of principles of working as a team member in a lab.
- Demonstrate the ability to research, analyze, criticize, and orally present positions and opinions about these issues.
- Demonstrate effective communication with other team members
- Use the knowledge and experience learned in this course to provide guidance in his/her future professional endeavors.

COURSE OUTLINE:
HOW THE TECHNOLOGY INTERNSHIP PROGRAM WORKS
Students may participate in the technology internship program following completion of their first year and second year studies. Students may elect to participate in more than one internship work term but cannot participate after their final semester of studies. Students who are interested in participating in the internship program must register for the course IT Practicum CTC 399. This is a three credit/units course requiring six contact hours per

week and will be awarded upon completion. Each intern will be placed based upon experience in the areas of Server Administration, Networks, Telecommunications, Desktop Support, and Helpdesk in the Information Technology Department.

MONITORING AND EVALUATING

All interns will report to an Information Technology Lead Staff member who will be responsible for delegating tasks throughout the program. All interns are responsible for completing assigned tasks. Bi-weekly each intern will fill out an Internship Status Report (See Appendix 2) and answering the questions identified. This course is a Pass or Fail based upon the completion of the status reports, tasks, attendance, and receiving a passing score on the Information Technology Lead Evaluation form. (See appendix 3)

INFORMATION TECHNOLOGY RESPONSIBILITIES

1. Ensure that an appropriate supervisor meets with the intern after he or she arrives on site and explains the internship expectations.
2. Provide the intern with an orientation to the workplace (through appropriate tours, personnel meetings, assigned readings, etc.)
3. Provide thorough instruction in and monitoring of safety requirements and practices for the workplace area.
4. Arrange for a suitable time to meet with the intern to mentor or discuss the intern's progress throughout the semester. Upon completion of the internship and within two-weeks of receiving the intern's status report, the Information Technology Lead will be asked to complete a Pass or Fail evaluation form. The form will be submitted to the faculty member indicating the intern Pass or failed the program.

BENEFITS TO TECHNOLOGY INTERNSHIP STUDENTS

The potential benefits to students of participating in the Science Internship are immense and include the following:

1. Gain meaningful "hands on" experience to complement the student's academic studies.
2. Develop a professional attitude that is reflected in the performance of their responsibilities and tasks and learn about the importance of professionalism in a technology environment.
3. Prepares a student to obtain a position in technology due to their internship experience and to stand out from other gradates in the eyes of employers. Appendix 1 outlines some of the various tasks by groups an intern can expect to learn throughout the program. This has been modified for online learning,

AMERICANS WITH DISABILITIES ACT

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 Disabled Student Services (DSS) 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 DSS. For information call (310) 243-3660 or to use the Telecommunications Device for the Deaf, call (310) 243-2028 or goto: http://www4.csudh.edu/dss/

COMPUTER INFORMATION LITERACY EXPECTATIONS

It is expected that students will:

1. *Use Microsoft Word for word processing unless otherwise approved by the instructor.*
2. *Be familiar with using email as a communication tool and check your official campus email account at least every other day.*
3. *Be able to access websites and online course materials which may require Flash and other plug-ins.*
4. *Use the library databases to find articles, journals, books, databases and other materials.*
5. *Be able to create an effective PowerPoint presentation.*
6. *Be able to record audio (ideally video) to share with the instructor via the web.*
7. *Have regular access to a computer and internet access for the term of this course.*

TECHNOLOGY REQUIREMENTS
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 CSUDH Toro Lab offers on campus access to workstations with a wide variety of commonly used software.

Visit the CSUDH Academic Technology Online Courses Technical Requirements page for more information on technology requirements.
Email:
All email communications from this course will go through your Toromail. Toromail is 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.
Office 365:
Course work will require you to submit work in Word format (.docx files). Active CSUDH students have access to Office 365 (Word, Excel, PowerPoint) for personal desktop and laptop computers at no cost.

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.

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.

COURSE POLICIES:
- Deliverables (Class Assignments, Projects) submitted late are not accepted.
- Deliverables (Class Assignment, Projects) not submitted before the end of the final class will earn 0%.
- Any exceptional, non-academic circumstances need to be discussed with the instructor as soon as they arise, prior to the due date of the deliverable. At the time of the discussion, NO make-up work will be assigned.

The instructor reserves the right not to award credit for deliverables that are incomplete. Partial credit is awarded at the instructor's discretion, and only for work that merits such an award. Assignments that are incomplete or incongruous with the specifications may be returned to the student.

MIDTERM & FINAL EXAM:
Midterm Exam 1 is during the 5th week of the class,
Midterm Exam 2 is during the 10th week of the class, and the date for the final exam is based on the final examination schedule printed in the campus Class Schedule. All projects are due no later than the last week of the semester.

 No makeup or early exams will be administered.

GRADES:
Students must successfully complete all three components listed below to get credit for this course.
- Bi-weekly progress reports (on-line).
- Attendance and active participation.
- Final Report: A 5 to 10-page written report due the end of semester. This is a compilation of progress reports, and what students learned and/or experienced during the semester.
- A 1 to 2-page written resume.

GRADING SCALE:
   Credit / No Credit

Appendix1: Projects

GREAT MINDS IN STEM CYBER HACKATHON:
- Create questions based on encoding, Wi-Fi hacking, packet analysis, steganography, password cracking, and digital forensics.
- Input questions to the competition scoring engine.
- Test all questions in the competition scoring engine.
- Provide real time support to competitors and sponsors.

DISCORD:
- Moderate chat channels.
- Create and modify bots.
- Improve functionality to meet changing demands.

CYBER SECURITY CENTER WEBSITE:
- Design graphics and content.
- Maintain and update WordPress and additional addons.
- Update security certificates and maintain the Linux operating system that hosts the website.

CYBER SECURITY CENTER WIKI:
- Create and maintain a wiki pages for the cyber security center.
- Update wiki pages using wiki syntax.
- Update wiki pages with documentation from other projects.

CYBER SECURITY CENTER GITHUB:
- Maintain and update the GitHub site.
- Improve current projects.
- Create supporting documentation.

COLLEGIATE CYBER DEFENSE COMPETITION (CCDC):
- Maintain and update the virtual practice environment.
- Work as black team to create misconfigurations in the blue team environment.
- Work as red team to exploit vulnerabilities in the blue team environment.
- Work as blue team to test the blue team environment.
- Improve the virtual environment for the official CCDC team members.

CYBER SECURITY CENTER PORTAL (CSCP):
- Maintain and update the system.
- Respond to support requests from CSCP users.
- Create and maintain the virtual machines within the environment.
- Support community outreach programs that utilize the system.

Appendix 2

California State University Dominguez Hills
Department of Information Technology Internship Program
Bi-Weekly Student Status Update

First Name:
Last Name:
Class Year:
Major:
Internship Project:
Date:

1. Explain in a paragraph the tasks that were assigned to you during the week.

2. Describe the methods you used to accomplish the tasks and indicate if all tasks

   were completed. If not, indicate why task was not completed.

3. Explain in a paragraph what you learned during the week and how this will

   enhance your technology skills in the future.

4. If applicable, indicate any opportunities for improving the internship program.

Appendix 3

California State University Dominguez Hills
Department of Information Technology Internship Program
Technology Lead Evaluation Form

First Name:
Last Name:
Class Year:
Major:
Internship Department:
Date:

1. Did the intern's quality of work meet the expectations of the tasks assigned?

   (Pass) or (Fail). Provide comments if necessary.

2. Was Intern able to perform the quantity of work assigned? Was work performed

   on time? (Pass) or (Fail). Provide comments if necessary.

3. Did the intern acquire the knowledge and expertise required for his or her areas of

   responsibility? (Pass) or (Fail) Provide comments if necessary.

4. Did intern communicate well with supervisor, employees, and other interns in the

   group? Was intern able to follow directions? (Pass) or (Fail). Provide comments if

   necessary.

5. Did intern display good customer service skills based upon your expectation?

   (Pass) or (Fail) (N/A). Provide comments if necessary.