

**CTC/ITC 399 – IT Practicum
Fall 2016**

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Classroom	SAC 2102	Class Time	9:00 AM– 2:45 PM F
Office	NSM A – A32	Office Hours	Tuesday 02:00 – 04:00 PM Thursday 02:00 – 04:00 PM AND/OR by Appointments
Phone	(310) 243-3398	URL	http://csc.csudh.edu

CATALOG DESCRIPTION: IT Practicum (3) - 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**

PREREQUISITES BY TOPIC: **Required Skills for Internship Program**

- Basic Computer skills:
- MS Office familiarity: Word & Excel
- Internet

- Soft Skills:
- Good written/verbal communications
- Good Interpersonal skills (Very Important)
- Ability to follow directions
- Excellent Customer Service skills

TEXTBOOK: None

REFERENCE: TBA

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 this course, 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 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 student to obtain a position in technology due to their internship experience and to stand out from other graduates in the eyes of employers.

Appendix 1 outlines some of the various tasks by groups an intern can expect to learn throughout the program.

ATTENDANCE

Attendance is important to participating and completing the internship program. All interns must be on time in reporting to the department assigned to them based upon the schedule arranged with Information Technology Lead for that area. An intern can miss up to a sessions, however any session missed must be made up within two-weeks. Failure to make up a missed session within two weeks will terminate the intern from the program.

Grading Breakdown: 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 student learned and/or experienced during the course of the semester. Also, a **1 to 2-page written resume**.

Grading Scale:

Credit / No Credit

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 go to: <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; and*
- 7. Have regular access to a computer and internet access for the term of this course.*

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.

Current areas available in IT:

- Network Services (2 students)
- Administrative Information Systems (3 students)
- Desktop Support (1 student)
- Instructional Tech (2 students)
- Server Group (2 student)
- Help Desk (4 students)
- Instructional Labs & new technology (2 students)
- Smart Class Room (?)

Appendix1

- Network Services (2 students)

Build a campus network with the following elements:

- Core switches (Cisco 6509 series switches)
- Distribution Layer switches (Cisco 4006 or 3750 series switches)
- Access Layer switches (Cisco 3750 series switches)
- Border routers

- Administrative Information Systems (3 students)

Migrate campus websites/content to the Percussion Web Content Management System (E-WCMS). Troubleshoot and QA test website links and report problems to the campus webmasters.

Required skills / knowledge include:

- HTML
- MS Word
- Adobe PDF

Preferred skills / knowledge include:

- CSS
- Understanding of Section 508 / ADA Compliance a plus
- Familiarity with Web Content Management Systems (ie Drupal, Wordpress, etc.)
- Mobile Framework

- Desktop Support (1 student)

Install and troubleshoot common and unique hardware and software issues

- Computer Rollouts For Campus
- Computer Moves
- Computer Repair, Windows & MAC, (Desktop and Laptops)
- System Diagnostics
- Monitor Repair
- Installing new printers
- Imaging Systems
- Install new software
- Configure and diagnose software issues
- System clean up
- Anti-virus, Ad-aware, Spyware
- Network Connectivity & Diagnostic
- Video Cards and Display Issues
- Installing and trouble-shooting wireless issues

- Instructional Tech (2 students)

INTEGRATED MEDIA WORKFLOW & ARCHITECTURE

Analyze requirements for media capture, editing, archiving, publishing to external and internal sites. Automate, integrate and optimize processes for media across campus. Document current as-is processes and proposed “to-be” recommendations for streaming media activities. Intern will analyze capabilities and test utilizing.

- Video formats (H.264, .wmv, .flv, Quick Time, etc..)
- Audio Formats (.mp3, .wav, etc..)
- Media Players: Flash Player, Windows, Real Player, Quick Time
- Research into new technologies/standards
- HTML
- YouTube, VIMEO, iTunes
- Dragon Naturally Speaking Voice Recognition software
- Camtasia Studio & Network Relay
- Video compression
- Process & Workflow Analysis
- Visio
- Server Configuration/Admin
- ADA accessibility requirements for Web and Instructional Materials
- Various captioning software applications
- Streaming Media Servers
- Interactive Media software
- JAVA
- Media File Conversion & Transformation
- Testing

Review Course Design requirements for interactive learning modules in CSUDH courses. Work with Instructional Designer and Media Developer to program, test, and implement effective interactive prototypes for faculty use. Preferred experience in the following computer languages, formats, and applications is desired:

- JAVA, C++, JavaScript, HTML, UML
- Adobe Flash/ActionScript
- Quality Assurance Testing
- Interactive Media software
- Streaming Media Servers
- Server Configuration/Admin
- Process & Workflow Analysis

- **Server Group (2 student)**
 - Setting-up test environments
 - Deploying and testing Windows & UNK servers
 - Deploying and testing Vmware Maintaining technical documentation
 - Patching test environments
 - Documenting patching errors and results
 - Installing various CMS systems
 - Installing and configuring test LDAP servers
 - Learning windows and UNIX permissions
 - Creating and maintaining IT Project plans
 - Installing memory, PCI cards and other hardware
 - Maintaining clean data centers and inventories

- **Help Desk (4 students)**
 - Helpdesk Front Office Support (via phone and/or walk-in)
 - Call Logging (log tickets from phone support, walk-in, and via voicemail using modified Helpweb form)
 - Wireless setup
 - Ticket Management (Using Heat WebUI application)
 - Testing
 - Other duties as assigned

- **Instructional Labs & new technology (2 students)**

Install, maintain, and configure imaging on new ordered and different models of computers using Norton Ghost or Clonezilla. Create images that include the following standard software and configuration.

 - Microsoft Office
 - Adobe Reader
 - Adobe Flash Player
 - Java
 - Forefront
 - SCCM
 - Microsoft Updates
 - Any BIOS or system updates along with SSID utility
 - Quick Time
 - Real Player
 - Windows Media Player
 - Roxio Creator
 - Wireless Configuration for laptops
 - Maintain and update the Images on different Models of computers
 - VDI

Install and troubleshoot common hardware issues

- Memory Diagnostic
- System Board's diagnostic
- CPU Cooling system
- Power Supply
- Battery
- Disk Drives
- CD/DVD Drives
- Monitors
- Printers
- Webcams
- Network Interface Cards (NIC)
- Network Cables
- Video Cards

Assist IT Computer Lab Coordinator in...

- VDI Project
- Windows 8 Project
- Special Projects as needed
- Provide Technical Support to Faculty, Staff and Students

Assist IT Computer Lab Coordinator in...

- Provide technical support to students, faculty and staff in the computer lab
- Maintain and support smart classrooms and conference rooms
- Install, maintain and configure imaging on computers in the lab

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 Department:

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 also 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.