ICS 282 (CRN 62018)
Computer Forensics (3 credits)
Summer 2022 (23 May 2022 ~ 12 Aug 2022)
ONLINE

WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide Oʻahu's Koʻolau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

Class Details

INSTRUCTOR: *John Oshiro*

OFFICE:	Hale Palanakila 119	**OFFICE HOURS:** TBA
TELEPHONE:	808-542-6541	**EMAIL:** oshiroje@hawaii.edu

Office Hours: Available by appointment. You can reach me via e-mail or by phone (given above). On all e-mail correspondence, please add the phrase "ICS 282" to the subject line, if you do not, responses *may* be delayed. I endeavor to answer all emails within 24 hours during the regular work week.

Background Mr. Oshiro has over 30 years in different segments of the Computer Science industry; primarily working with the US Government. He has extensive experience with systems security, multi-lateral (international) and enterprise-level information systems, and managing systems and software development. Mr. Oshiro has taught at the college level for over 19 years.

ICS 282 Course Details

Welcome to ICS 282 – Computer Forensics. In this course we will be exploring some of the tools, techniques, and principles computer forensics to examine digital media in a forensically sound manner with the aim of identifying, preserving, recovering, analyzing and presenting facts and opinions about the digital information. This information is normally found on digital artifacts such as computer systems, hard drives, CDs, and other storage devices, as well as electronic documents and files such including emails and images.

Key Dates: **Last Day of Instruction:** 5 August 2022
Finals Week: 7 August 2022

Course Description: This course covers basic computer forensics including operating system diagnostics, the use of forensic toolkits to examine and validate computer activity and techniques for the proper collection, examination and preservation of forensic evidence. Pre-Requisite(s): ICS 171 with a C or better, or concurrent enrollment, or consent of the instructor.

Student Learning Outcomes: Student learning outcomes for this course are:

- Discuss the rules, laws, policies, and procedures that affect digital forensics
- Demonstrate the proper use of one or more common digital forensics tools
- Describe the steps in performing digital forensics from the initial recognition of an incident through the steps of evidence gathering, preservation and analysis, through the completion of legal proceedings

Text Books: (1) *Certified Cyber Forensics Professional Certification,* by Chuck Easttom (ISBN: 978-0-07-183611-1)

Class Procedures: All material will reside on the Laulima system. This syllabus is a living document and as such, the students are requested to check it weekly (you are required to log into the site weekly). Students will read and study on their own time/schedule. This class will require students to be pro-active and disciplined in keeping with the proposed schedule and due dates. Returned graded material will allow the student to gauge progress and understanding; any issues and questions can be rectified immediately

Tools: During this class you may have to download and install various tools to use in projects (this will be an assignment, specifics will be on Laulima). I will point you to the site to do the download, but it will be up to you to research, download, install, and configure the tool if necessary. Most of these tools are available for multiple operating systems, but if you are assigned a tool that is not available to you for your operating system, you need to inform the instructor immediately; you may be given different tool and/or assigned a compatible system to use – it will be important to check the assigned tools quickly upon assignment, it this is delayed, you not be given an opportunity for replacement (i.e., your grade may be negatively affected).

ASSESSMENT TASKS, GRADING, AND SUBMISSION POLICIES

Course Outline: Course grading breaks down as follows: (*No plus or minus grades given, no "rounding"*)

Final	30 %
Quizzes	20 %
Project	15 %
Paper	20 %
Lab 1	15 %

90% - 100 %	"A"
80% - 89%	"B"
70% - 79%	"C"
60% - 69%	"D"
59% & below	"F"

To prevent grade inflation and to encourage individual achievement, the maximum # of A grades will not exceed 20% per class.

Exams format: The final (which is cumulative) will include short answer and true/false type questions. The questions will be based on material presented/covered online. You must pass the final to pass the course.

Projects: There are 2 projects/labs that will be released during this class – they will be placed on Laulima site and will be in the schedule. These projects will be based on material covered in class.

Returns: The instructor endeavors to return all graded assignments to the students within two weeks of receipt (most times its less than 1). Exams and large projects may take up to 2 weeks to grade and return.

Late Policy: If a student will miss a deadline or due date due to work, deployment, medical or personal problems, etc., they MUST notify the instructor ahead of time. All missed deliverables will be given a grade of zero, unless prior arrangements are made with the instructor. This should NOT be a common occurrence.

Incompletes: No *Incompletes* or *N* grades will be given except in the most extreme of emergencies (at the Instructor's discretion – e.g.: death in the family).

Access: You should be logging into Laulima at least once a week in addition to attending class. Students bordering on in-between grades will be given the higher grade if in the opinion of the instructor have been showing a regular presence on the Laulima system (this affects the class participation grade).

Schedule   A schedule of assignments and due dates will be posted (and updated if need be) on the Laulima site.

Handouts: There may be various handouts given to students during the semester. These items will be emailed and posted to Laulima. These handouts cover material that could be covered on an exam

LEARNING RESOURCES

Laulima: Laulima is an online course management system and will be used extensively in this course. The class schedule, assignments, and announcements will be posted and administered through Laulima. (https://laulima.hawaii.edu/portal). The class *Announcements* will also include the *Due Dates* for any course work that may be due at the end of each week. It is CRUCIAL to check your *email*, the *Course Schedule*, and the *Announcements* page regularly to make sure you are keeping up with the requirements and pace of the course

Required software and System. No special software is required for this course beyond MS office (or equivalent) 2019 or higher. This class will include submission of papers and other assignments requiring use of a word processor, possibly spreadsheet software (e.g. Excel), and regular, internet access to browser websites for research. You can download free versions of Office 365 (available to WCC students) through special programs with Microsoft – contact the instructor or the WCC bookstore if you wish to avail yourself of this. Windward Community College also provides computers for your use in the library, lab, and in specific areas in Hale Pãlanakila.

Quick Links:

Windward Community College	http://www.wcc.hawaii.edu OR http://windward.hawaii.edu
WCC account activation (to use local systems)	https://accounts.wcc.hawaii.edu/secure/index.php
Laulima	https://laulima.hawaii.edu
Library Learning Commons	http://library.wcc.hawaii.edu
WCC (Map)	https://windward.hawaii.edu/About_WCC/Campus_Map.php
WCC Calendar of Events	https://windward.hawaii.edu/Calendar/

Instructor Expectations and Principles:

1) It is your personal responsibility as an online student to ensure that you have an access to a reliable computer with the Internet connection.

2) It is the burden of the student to demonstrate mastery of course material to the instructor.

3) If you are having problems – ask! Don't let confusion grow. I will assist you as needed, but you still must get the correct solution before you get credit – I will not do your thinking for you.

4) You can work with others, BUT, ensure you must submit your own work - do not "work together" on a solution then make copies for each person to turn in. If you "work together" to gain understanding, ensure you separate before you prepare your submission – if the submissions look too similar you may be asked to prove that it is your work.

5) Don't let other students copy – it is your responsibility to ensure that your work is not made available to others. Academic dishonesty "F"s often times comes in pairs.

6) Any activity that diminishes the instructor's ability to analyze and rate a student's individual knowledge of course material is prohibited.

7) Complete assignments on time. Assignments should be professional and meet the highest standards with regards to: logic, research, and content, grammar, and spelling.

8) Be prepared for tests and exams. This can be accomplished by working all assignments and reading ahead.

9) Think before putting pen to paper (or fingers to keyboard). Analysis is key; thinking and understanding prior to attempting to solve a problem is critical.

10) Time goes by very quickly and there is a lot of work to be accomplished. You will likely be putting in anywhere from 10-12 hours a week doing assignments, reading, or doing research. Unexpected things happen often in life – do your best to get ahead so you can more easily deal with these events.   Good time management and study discipline will be critical for keeping up in the class and doing well.

11) Communicate early and often with the instructor – and discussions of material (not exams) with other students is highly encouraged.

12) If you have problems or issues (e.g. illness, housing, death in the family, etc.) during the semester, let me know as soon as possible; we can work together to get your through this class. But I can't help you if I don't know about it.

Conduct and Academic Dishonesty Policies

Online Conduct: Everything done electronically on the university systems or via email can be considered public record and you are part of the larger, global, online community. As such, it is expected that all students demonstrate appropriate language, behavior, respect, and understanding that would prevail in any campus situation. All students should do their part to ensure a pleasant and safe online environment for others – including:

a) Watching for virii, worms, bots, etc. Do not allow these items, or any other type of code that disrupts or interrupts/interferes with other users' use of the online environment.
b) Showing respect for all faculty, students, staff regardless of age, race, gender, religion, national origin, veteran's status, disabilities, sexual orientation, etc.
c) Being honest. Misrepresentation of any kind will not be tolerated. This includes any type of identity theft or intentional electronic "fakery" (spoofing, relaying, etc.)
d) Being polite. Ensure that any content submitted electronically is free from harmful, threatening, libelous, and abusive content. This also includes profanity.

Submissions   The Internet is a great research tool and it should be utilized as often as possible as a study aid; but please ensure that you **DO YOUR OWN WORK.**   Turning in material that is plagiarized is a serious offense. Study and use the information found on the internet (and any other sources) to help you understand, but when it comes time to do your work – use your own words, and do not copy, cite, or attempt to "paraphrase" or "rephrase" someone else's work. If you truly understand the material, you will be able to use your own words and examples. Also, consider your source when reading information on the Internet – not everything out there would be considered a "reputable" source. Be aware that all submitted items can be run through academic tools which scan for and can catch, plagiarism attempts.

Academic Dishonesty: The penalties for academic dishonesty are explicitly noted in the Windward Community College student conduct code. Students are expected to maintain the highest moral and ethical standards. Any student, who cheats, lends assistance to others or hands in work that is not his/her own, will be penalized as outlined in the student conduct code. Furthermore, each student is responsible for ensuring that their work is not made available to others for study or duplication. Ignorance of this policy is no excuse of any academic dishonesty. Ensure your work is your own. Copyright infringement or violation of patent, trademark, proprietary information, and/or confidentiality agreements will not be tolerated. Consequences include (but are not limited to)

1st offense – a "0" for the assignment for all involved and a written warning
2nd offence – an "F" for the class

The instructor reserves the right to notify the administrative offices of any academic dishonesty violations – this can incur separate consequences such as probation or worse.

DISABILITIES ACCOMMODATION STATEMENT

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale 'Akoakoa 213 for more information.

TITLE IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, Windward CC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235- 7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235- 7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.