

ICS 184 (CRN 60360) Introduction to Networking (3 credits) Spring 2019 (7 January 2019 ~ 5 May 2019) 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 Ko'olau region of O'ahu 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, Rm 119 OFFICE HOURS: see below EMAIL: oshiroje@hawaii.edu

Office Hours: Since this class is online, any "office hours" will need to be coordinated ahead of

time. I check email frequently during the day - on all correspondence, please add the words "ICS 184 -" to the subject line (this helps me sort and answer your email quicker). I endeavor to answer all emails within 2-4 hours during the regular work week (most times faster). Once coordinated, we can "meet" via skype or other application. If you need to physically meet with me, let me know via email and we can schedule a mutually acceptable time. You can reach me during the day at 542-6541, please leave a message if I do not answer.

Generally I can be on campus MW from 1530-1730.

Key Dates: Last Day to withdraw without a "W": 30 January 2019

Last Day to Withdraw with a "W": 25 March 2019

Last Day of Instruction: 2 May 2019 Finals Week: 4 May ~ 10 May 2019

Holidays: Spring Break: 18~22 March 2019

ICS 184 Course Details

Welcome to ICS 184 – Introduction to Networking. In this course we will be exploring the tools, techniques, and principles of computer network design and management. Because this class is part of the computer security certification, we will also be spending time connecting and exploring the role and impact of network design & administration on overall computer security. You will be spending a lot of time doing independent research on topics covered by the instructor. This class will require that students be pro-active and disciplined in keeping with the proposed schedule and due dates.

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Catalog/Course Description: This course provides the student with the knowledge and skills to manage, maintain, troubleshoot, install, operate and configure basic network infrastructure, as well as to describe networking technologies, basic design principles, and adhere to wiring standards and use testing tools. The course also introduces the student to network security concepts.

Student Learning Outcomes: Upon completion of the course, the student will be able to:

- Manage networking projects as part of a team
- Discuss information security technologies such as cryptography, digital signatures, key management, and authentication as they relate to computer networks
- Describe the fundamental concepts, technologies, components, terminology, protocols, standards organizations, and business, legal, ethical, and security issues related to communications and data networks
- Describe a basic secure network architecture in accordance with current best practices given a specific need and set of hosts/clients
- Use current network tools to monitor, map and troubleshoot a network and to track and identify packets

ASSESSMENT TASKS, GRADING, AND SUBMISSION POLICIES

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

Final	30 %
Projects/labs (7x)	42 %
Chapter review (14x)	28 %

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

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 throughout this class, book material, and handouts found on Laulima.

Chapter Review: Each chapter will have review questions assigned to you – these will be placed on Laulima and will test your comprehension of the material covered in the corresponding chapter. These are due Fridays by midnight – they are done through Laulima – ensure you have enough time to complete it (don't start at 2330)

There are 7 labs (collectively worth 42% of your class grade) that will be assigned – It will be placed up on Laulima with appropriate instructions. Some of the labs will require you to download software from the Internet – see software requirements in the next section. The labs are due on Saturdays by midnight

The instructor endeavors to return all graded assignments to the students within two weeks of receipt (most times its less than 1). Exams 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 <u>ahead of time</u>.

Generally, you are allowed to submit assignments up to 1 week past the due date for a penalty (1 letter grade). 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.

Windward Community College is an equal opportunity, affirmative action institution.

Labs:

Returns:

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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).

COURSE PLAN

Schedule A schedule of assignments and due dates will be discussed in class, and posted 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

Class book: There are many excellent resources and books online to consult during this class. This class will be based on the following book:

(Beasley, Jeffrey S. (2018). <u>Networking Essentials, Fifth Edition</u>. Pearson Education, Inc.: Indianapolis, IN. ISBN: 978-0-7897-5874-3.

I will also upload to Laulima other sources for you to consult. However, it's better to get this book as a topical guide, and then from there go to other sources for deeper information.

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). It is IMPORTANT to check your *email*, the *Course Schedule*, and the *Announcements* page regularly.

Required Software and System. Your system should have network (internet) connectivity and be able to support MS word (or any equivalent word processing application that can read, edit, and save MS word files) and Adobe Reader (free download from the Internet) – but compatible software is acceptable with the understanding that you must be able to troubleshoot the software issues yourself. You will need to some software to complete your lab assignments. You do need "administrative" level access to your system as some tools will not work at the regular "user" level. Instructions to download and the use the software will be included in the lab instructions

Quick Links:

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

Instructor Expectations and Principles:

- It is your personal responsibility as a student in the ICS discipline and this class 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.

Students can upload papers to http://www.TurnItln.com to have papers checked for authenticity, highlighting where the paper potentially fails to appropriately reference sources. 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 (Vice Chancellor for Student Affairs) 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.

ALTERNATE CONTACT INFORMATION

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alakai 121 Phone: 808-235-7422 Email: wccaa@hawaii.edu