

Oregon Health & Science University
Department of Medical Informatics & Clinical Epidemiology
BMI 549/649
Health Information Privacy and Security
Winter Term, 2015

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Text

Information Security in Healthcare: Managing Risk, Terrell W. Herzig, Ed; HIMSS, 2010
ISBN: 978-0-9821070-2-7
Available from
<https://marketplace.himss.org/OnlineStore/ProductDetail.aspx?ProductId=1550>

Course Description

This course focuses on the privacy and security issues associated with health care information and basic elements of computer security. Topics covered include:

- The culture and ethics of privacy
- HITECH/HIPAA requirements
- Privacy and its impact and health outcomes
- Patient consent
- EHR requirements
- Access, authorization, authentication and auditing
- Passwords and password management
- Prevention, detection and reaction
- Encryption
- Physical security
- Network security
- Privacy and security policies
- Risk assessment
- Viruses, trojans and worms
- Software design issues
- Security analysis tools
- Maximizing system uptime

Prerequisites

BMI 540 or computer science background recommended.

Grading

The course will require completion of homework assignments, labs, quizzes, a final examination and a term paper/project. The final grade will be determined with an

approximate weighting of: homework and labs 25%, quizzes 30%, class participation 5%, final examination 20% and term paper or project 20%.

Class participation is graded each week on a 5 point scale. You are expected to participate in each discussion topic as you would an open discussion in class. Make your points, comment on other's posts, and support your points during the week. You should participate during the week, not just make a statement and never return. Posting earlier in the week is recommended; it allows your points to be central to the discussion during the week.

Late assignments will be penalized.

The final course assignment consists of either a paper or a security project with proposals due by week 5. For this project, write a 7-10 page 10 point single-spaced paper on privacy and security and its impacts in your area of interest, or perform a security analysis and describe the process and report the findings.

Papers are expected to be of publication quality with supporting references.

Class Schedule and Assignment List (subject to change)

Date	Topics	Text Chapters	Due
Week 1 Jan 5 – 11	Introduction Regulatory Landscape	1	
Week 2 Jan 12 – 18	Culture of Privacy Civil Liberties		
Week 3 Jan 19 - 25	Risk Management Data Management	2, 3	Quiz 1
Week 4 Jan 26 – Feb 1	Audit Logging Access Management	4, 5	
Week 5 Feb 2 – 8	Data Sharing Portable Devices Medical Devices	6 - 8	
Week 6 Feb 9 – 15	Remote Access Training Incident Response	9 - 11	Quiz 2
Week 7 Feb 16 – 22	Disaster Recovery Compliance Partners	12 - 14	
Week 8 Feb 23 – Mar 1	Physical and network security Policy Personal health records	15 - 18	
Week 9 Mar 2 – 8	Viruses, trojans and worms Software design issues		
Week 10 Mar 9 - 15	Security tools Root cause analysis		Final, term papers due March 18

Course Grading Policy

Final grades are determined at the end of the quarter and usually are assigned as follows:

A	94 – 100
A-	90 – 93
B+	87 – 89
B	83 – 86
B-	80 – 82
C+	77 – 79
C	73 – 76
C-	70 – 72
D/F	< 70

Graduate Studies in the OHSU School of Medicine is committed to providing grades to students in a timely manner. Course instructors will provide students with information in writing at the beginning of each course that describes the grading policies and procedures including but not limited to evaluation criteria, expected time needed to grade individual student examinations and type of feedback they will provide.

Class grades are due to the Registrar by the Friday following the week of finals. However, on those occasions when a grade has not been submitted by the deadline, the following procedure shall be followed:

- 1) The Department¹ /Program Coordinator² will immediately contact the Instructor requesting the missing grade, with a copy to the Program Director and Registrar.
- 2) If the grade is still overdue by the end of next week, the Department¹ /Program Coordinator² will email the Department Chair directly, with a copy to the Instructor and Program Director requesting resolution of the missing grade.
- 3) If, after an additional week the grade is still outstanding, the student or Department¹/Program Coordinator² may petition the Office of Graduate students for final resolution.

¹ For courses that are run by a specific department.

² For the conjoined courses (course number is preceded by CON_ that are run by Graduate Studies.

Academic Honesty

Academic honesty is required in order to pass this course. Students are encouraged to help each other; nevertheless, all quizzes, written assignments and presentations must be the work of the individual student. Literature and resources (including Internet resources) employed in fulfilling assignments must be cited.

Likewise, students are expected not to collaborate on the answers to homework problems, although discussion of the concepts involved and working of similar problems together is permitted.

See http://www.ohsu.edu/xd/education/library/research-assistance/plagiarism.cfm?WT_rank=1 for information on code of conduct for OHSU and <http://www.ohsu.edu/xd/education/teaching-and-learning-center/for-students/index.cfm> for more information on citing sources and recognizing plagiarism.

In an effort to uphold the principles and practice of academic honesty, faculty members at OHSU may use originality checking systems such as Turnitin to compare a student's submitted work against multiple sources.

To protect student privacy in this process, it will be necessary to remove all personal information, i.e. student name, email address, student u-number, or any other personal information, from documents BEFORE submission.

Copyright Information

Every reasonable effort has been made to protect the copyright requirements of materials used in this course. Class participants are warned not to copy, audio, or videotape in violation of copyright laws. Journal articles will be kept on reserve at the library or online for student access. Copyright law does allow for making one personal copy of each article from the original article. This limit also applies to electronic sources.

To comply with the fair use doctrine of the US copyright law, Sakai course sites close three weeks after grades are posted with the Registrar. Please be sure to download all course material you wish to keep before this time as you will have no further access to your courses.

Use of Sakai

This course will have an online component, which can be accessed through Sakai, OHSU's online course management system. For any technical questions or if you need help logging in, please contact the Sakai Help Desk.

Hours: Sakai Help Desk is available Mon – Fri, 8 am – 10 pm and weekends and holidays 12 pm – 5 pm.

Contact Information:

(Toll-free) 877-972-5249

(Web) <http://atech.ohsu.edu/help>

(Email) sakai@ohsu.edu

Student Access

OHSU is committed to providing equal access to qualified students with disabilities. Student Access determines and facilitates reasonable accommodations, including academic adjustments and auxiliary aids, for students with documented disabilities. A qualified student with a disability is a person who meets the academic and technical

standards requisite to admission or participation in a particular program of study. As defined by the Americans with Disability Act (ADA), a person with a disability has a physical or mental impairment that substantially limits one or more major life activities of the individual. This may include, but is not limited to, physical conditions, chronic health issues, sensory impairments, mental health conditions, learning disabilities and ADHD. Student Access works with students with disabilities from all of OHSU's educational programs and at each campus.

Each school has an assigned Program Accommodation Liaison (PAL), who acts as an "in-house" resource for students and faculty concerning access issues for students with disabilities. The PAL works in collaboration with Student Access to implement recommended accommodations for students with disabilities.

It is recommended that you contact Student Access to consult about possible accommodations if you a) received disability accommodations in the past, b) begin experiencing academic difficulties, and/or c) are given a new diagnosis from your healthcare provider.

Learn more about Student Access:

Phone: 503-494-0082

(Web) www.ohsu.edu/student-access

(Email) studentaccess@ohsu.edu

DMICE Communication Policy

1. If the syllabus directs the student to contact the TA before contacting the instructor, the student should do so. Otherwise, the student should contact the instructor and allow 2 business days (not including weekends) for a response.
2. If the student does not receive a response from the instructor within 2 business days, s/he should contact the TA (if there is one). When contacting the TA s/he should cc the instructor and Diane Doctor at doctord@ohsu.edu.
3. If a student does not receive a response from the TA within 1 business day (not including weekends), s/he should contact Diane Doctor at doctord@ohsu.edu and cc the instructor and the TA.
4. If Diane does not reply within 1 business day (not including weekends), the student should contact Andrea Ilg at ilgan@ohsu.edu.
5. Students having difficulties with Sakai should contact the Sakai Help Desk at sakai@ohsu.edu or at (877) 972-5249. Sakai help is available M-F from 8am to 10-pm and weekends from Noon to 5pm. Do not contact the instructor.