

# IS 376: INFORMATION TECHNOLOGY & SOCIETY

## Exam #3 Review

Exam Date & Time: Thursday, December 11, 2014, 10:00 – 11:40 AM

### Professor Kapatamoyo Half – 90 Points

The exam is based on Chapters 11-12 of J.L. Harrington's textbook, Chapters 1, 6, 8, and 12 of H.T. Tavani's textbook, and the PowerPoint slides.

You must know the following topics in detail:

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| a. 3 perspectives of Ethics  | n. Computer Fraud and Abuse Act (CFAA)     |
| b. Descriptive Ethics  | o. USA Patriot Act                         |
| c. Situational Ethics  | p. Offshoring                              |
| d. Deontological Theories  | q. False Claims Act                        |
| e. Utilitarianism  | r. Copyright Act of 1790                   |
| f. Natural and Positive Rights   | s. The Copyright Act of 1976               |
| g. Philosophical Foundations of IP   | t. Copyright Term Extension Act of 1998    |
| h. Web 1.0 and Web 2.0   | u. Types of Copyright Infringements        |
| i. Effects of IT on Employment   | v. Public Domain                           |
| j. Effects of IT on Businesses   | w. Fair Use Doctrine                       |
| k. Globalization and the Workforce   | x. Fair Use Analysis                       |
| l. Telecommuting   | y. Two Key Fair Use Cases                  |
| m. Federal Departments Involved in Protection of Citizen Rights in Online Environments | z. Three Laws of Robotics per Isaac Asimov |



### Professor White Half – 60 Points

#### Format:

- Thirteen 1-point short-answer questions (multiple-choice, true-false, matching)
- Six 2-point short-answer questions (multiple-choice, true-false, matching)
- Five 4-point explanation questions (4 points  $\approx$  2½ minutes = 1-2 sentences)
- One 15-point essay/discussion question (15 points = 10 minutes = 6-8 sentences)

#### Topics:

#### **Cyberwar (20 points)**

Article: "Writing the Rules of Cyberwar"

Course Notes: 11/11

Just War Doctrine, Geneva Conventions, Stuxnet, Quantum Dawn 2, Dragonfly, Tallinn Manual

#### **Internet 911 (12 points)**

Article: "911 for the 21<sup>st</sup> Century"

Course Notes: 11/13

Basic 911, Enhanced 911, Next Generation 911, 6/2012 East Coast Derecho, 2013 FCC D.C. Mislocation Data, 4/2014 Multistate Outage

#### **Biomedical Computing (28 points)**

Article: "The End of Disability"

Course Notes: 12/2

Telemedicine, Expert Systems, Medical Databases, HIPAA, Pandemic Tracking, Robotic Prosthetics, Pacemakers, Medical Imaging, Deep Brain Stimulation, BRAIN Initiative, Surgery Simulators, Drug Implants