The Hebrew University of Jerusalem

Syllabus

CYBER LAW - 67398

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HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Computer Sciences

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Dr. Abraham Tennenbaum

Coordinator Email: avi3333@gmail.com

Coordinator Office Hours:

Teaching Staff:

Dr. Abraham Tennenbaum

Course/Module description:

The integration of the computer into modern society is causing unpredictable technological and social changes.

The dominance of the Internet in the commercial and social life has raised new issues. Questions like jurisdiction, anonymity, contract making, infringement, privacy, tort laws, and many others. Every day, courts around the world deal with these innovative questions, and the solutions are different, frequently changing, and contradicting.

In the not-so-distant future, we will probably have to discuss questions that today appear to be science fiction, but they already have lively legal discourse, such as civil rights for robots, the legal status of supercomputers, the law of autonomic cars, and more.

Even experienced jurists feel unsecure in cyberspace, and certainly those who are not jurists. The current lack of clarity can cause computer experts to act wrongly. Some examples are given:

- A computer expert wishes to work with a data storage company. However, he wants to examine the security measures of the company's sites by using several attack / test programs. Is he allowed to do so? Should he get permission from someone? Is it legal to maintain harming software that can be used for these tests?

- A software developer managed to develop a cheap encryption application that can help encrypt documents/messages. Is it permissible for him to market this via the Internet to everyone? Does he need license for that? Does it depend on the encryption level and/or other factors?

- An academic researcher seeks to learn about ransom scams. He decided to turn to the dark web to purchase ransom software, find out prices, their functionality, bargain for the price, check them before buying, and so on. Are these actions permitted? Or will it considered illegal such as buying drugs from criminals?

These are just few examples. The purpose of the course is to provide a basic guidance for computer science students about basic legal situations, the actions they must be careful from, and the ways to find out what is permitted and what is forbidden.

Course/Module aims:

To give a brief legal background that can clarify to computer science' students

what is permissible and what is forbidden, and what are the legal problems they may encounter in the future.

Learning outcomes - On successful completion of this module, students should be able to:

To learn basic concepts in law that can be relevant for computer experts

Attendance requirements(%):

According to the department's regulations

Teaching arrangement and method of instruction: Lectures that will be accompanied by reading materials and classroom discussion

Course/Module Content:

Topic list:

1. Introduction to Law
A brief introduction to law will be necessary. We will briefly describe the main legal systems (continental and accepted), the roots of Israeli law, the methods of legislation, and some essential basic terms in criminal law.

1. Jurisdiction and choice of law
Penal law, as a rule, applies to behavior that occurs within the borders of the state. What are the boundaries of the Internet? Can one country try to regulate the Internet? What is the law when an operation is prohibited in one country and permitted in another? What law is relevant for the Israeli software developer? What are the provisions of the Israeli law? And which international treaties if any are applicable?

3. Israeli Computers Law and its limitations
The Israeli Computers Law was enacted in 1995 after ten years of preparation. Though, the Internet does not appear in it. However, it is the most relevant law for computer offenses and we will review it.

4. Regulation and standardization of cyber protection
Who is an 'expert' for network protection? What measures can he take? Who is allowed to export means of encryption/decryption? Is pro-active protection permitted? And how would we define the thin line between defense and attack? In Israel there is another problem of exporting encryption/decryption devices that can be considered as 'weapons' and therefore have special regulation.

5. Metaphors in cyber law - and the implications for legislation

Jurists do not claim to understand technology. Therefore, cyber phenomena are often explained by relying on existing laws in the physical world (e.g., an 'internet site' is compared to a home, and taking control of a site is considered a 'burglary'). This reliance distorts legislation and verdicts. Examples for that will be described.

6. Computer intrusion
What is the offense of 'entering' a computer? Is it a technological or legal offense? Is it possible to talk about connecting to a computer as an 'intrusion'? How it is interpreted in Israel and around the world?

7. The laws of various types of malware
What are the legal definitions of computer viruses, Trojans, DDoS, and so on? Is it permitted to develop such malware? What the law says in the world and in Israel?

8. What is the status of personal information after death?) Digital estate (
Everyone has today accounts on social networks, email accounts, shopping sites accounts, and more (Facebook, Gmail, and Amazon are the best-known ones.) What is the legal status of these accounts after death? Are they part of the estate that goes to his family? Heirs? What are the laws that govern it in Israel and around the world?

9. Privacy and databases
The concept of privacy is complex and apparently varies from society to society and from period to period. How do we apply privacy laws in the Internet age? Are the same rules enforced on the 'big' players of the net? (Google, Facebook, Amazon). How will the new European Privacy Regulations (GDPR) affect Israel? And how will the new Israeli data security regulations affect the Israelis?

10. The Tallinn Guide and the Laws of War in Cyberspace
There is no doubt that any future war will include cyberspace's war. What is allowed and what is not allowed in the cyber war? Is a cyber-attack considering an act of war that justifies air strike? Is the Tallinn Guide written for this purpose implemented in practice? What is Israel's place in cyber warfare?

11. Intellectual property: protection and infringement
What is intellectual property? Is there intellectual property protection for software and hardware? How can a developer protect his work? And are the laws compatible with today's technological reality? Emphasis will be placed on the criminal aspects of intellectual property.

12. Legal questions of Bitcoin and virtual money
Is Bitcoin a currency or commodity? Is it legal to use in Israel? Are its users committing an offense? Should Bitcoin holder pay income tax? Each of the answers has its own legal ramifications, some of which are even criminal.

13. Legal questions of a car without a driver

What are the Autonomous Car and the Connected Car? Who will be responsible for road accidents? Who is responsible on the software integrity? What regulation is already in place in Israel and abroad?

14. A recent and final ruling
Examples will be presented of real and up-to-date court cases in which courts in Israel and abroad discussed cyber law in 2017 and their implications for companies and computer experts.

Required Reading:
Articles and verdicts that will be accessible on the lecturer's website

Additional Reading Material:
NON

Course/Module evaluation:
End of year written/oral examination 100 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information: