

T-110.5291  
Seminar on Network Security  
2013

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# Today's agenda

1. Overview and organization
2. English support
3. Course theme
- 4. Project topics**
5. Timetable
6. Signing up for the course
7. First draft, full draft, final paper
8. What is a good seminar paper?

# Overview

- T-110.5291 Seminar on Network Security P (5 cr)
- **Master-level** course
- Students write a technical paper (~5-8 pages)
  - format of a technical or scientific conference publication
- Requirements:
  - writing the paper
  - presentation and attendance on the seminar day
  - acting as opponent for another student
  - mandatory course feedback
- **Individual tutor** for each student
- **Individual work**, no groups
- Max ~25 participants by application

# Organization

- Responsible teacher: **Tuomas Aura**
- Course assistant: **Sandeep Tamrakar**
- All course material will be in **Noppa**
- **Email alias:** [t-110.5291@tkk.fi](mailto:t-110.5291@tkk.fi)
- **Optima** for paper and comments submission
- Tutors are researchers, doctoral students, and experienced security professionals

# English support

- Roger Munn
- Individual feedback on your writing
- Three meetings, groups and time in Noppa
- No study credits
- **Mandatory** — or you will be penalized for any poor language in your paper

# Course theme 2013

- Theme: **New Threats and Defenses**
- Over the last few years, many of the Internet security nightmare scenarios have become true: government-sanctioned cyber attacks, total surveillance, man in the middle on every connection, online bank robberies etc. Is it possible to cope with the new and heightened threats? What are the real issues? How can be old defense mechanisms be adapted to the current security situation, or do we need new ones? We invite the students and tutors to think about these questions, and about other recent developments in network and computer security. As always, the purpose of the annual theme is to provide inspiration, and other security, cryptography and privacy related topics.

# Topic introductions

- Topics list in Noppa
  - Doctoral students should propose their own topic
  - Master students are usually better off choosing a topic from the list
  - Everyone must have a tutor
- Tutors: please introduce yourself first, then use 1-2 minutes on each topic

# Timetable

See the detailed schedule in [Noppa](#)



# Signing up for the course

- Students sign up by sending an **application** to [t-110.5291@tkk.fi](mailto:t-110.5291@tkk.fi)
  - Subject: “Signup for NetSec”
  - Name - Firstname Lastname
  - Student number
  - Aalto E-mail address (We prefer using Aalto email address)
  - Your Aalto University account username (for Optima account)
  - Participation in Integrated English language support (Yes / No). If No, please specify strong reasons.
  - Your major and minor (or MSc program)
  - Your transcript of completed courses (as attachments)
  - 5 Topics of your choice ordered by your priority (topic number, topic title, Tutor Name).
- *Bachelor and exchange students, 1st-year Master student: discuss with professor before signing up*

# First draft (3.10.)

- **Outline**: logical and makes a point (a message, central theme, focus, something to say)
- At least **one page of text** (readable English)
- **Key literature references**
- Use the course template and **Latex and Bibtex**
  - Note: use the new template from Noppa
- **Tutors should help especially with the outline and finding good references**

# Full draft (29.10.)

- 5-8 pages using the Latex template
- Most of the text and main ideas written, structure close to final
- References: original or authoritative, relevant, correct, up-to-date
- One week later, deadline for tutor and opponent comments

# Contents of a good seminar paper

- Makes a small **contribution** to technical or scientific knowledge
  - **Original work** with the student's own idea, analysis, evaluation, measurement, implementation, comparison, summary, example, experiences etc.
- **The reader learns something**
- Uses **diagrams** and **examples**
- Covers a broad area extensively or a smaller area in depth
- **References to high-quality scientific literature and authoritative technical sources**

# Format of a good seminar paper

- **Readable** and correct English
- **Neutral and objective** style suitable for scientific and technical writing
- **Structure** of a conference paper: title, abstract, introduction, background, body sections, conclusion, references, (appendices)
- In computer-science papers, body sections can vary:
  - experimental setup, results, discussion
  - problem, solution, evaluation
  - architecture, implementation, evaluation
  - technology 1, 2, 3, comparison (but make sure to do your own analysis!)
- Correct and sufficient in-text citations to **acknowledge sources**; correct and consistently formatted references

# Finding research literature

- Finding research publications:
  - Google Scholar, <http://scholar.google.com/>
  - Microsoft Academic Search, <http://academic.research.microsoft.com/>
  - ACM Digital Library / ACM Guide to Computing Literature, <http://dl.acm.org/>
  - IEEE Xplore, <http://ieeexplore.ieee.org/>
- Access to PDFs in online libraries from home:
  - Most online libraries can be accessed freely from the campus
  - Library portal <http://www.nelliportaali.fi/> enables access from anywhere: log in with your Aalto user account, search for the online library (“find database”) that you want to access (e.g. “LNCS”), and follow the link to the library

# Cut and paste? – just don't!

- Do not cut and paste text or images from the web or somewhere else
- Do not cut and paste even if you plan to change it later
- Do not rewrite somebody else's text sentence by sentence
- Clearly mark quotations, for example:
  - *According to Smith [14], "uncertainties include fuzzyness and randomness".*
  - *The structure this this section follows closely Smith al. [15].*
  - You can quote images but it is much better to draw your own
- Anyone found copying even a small amount of someone else's work without correct citations will fail the course and may face further disciplinary action

Questions?