

IT security

Protection of IT infrastructure

- NotPetya attack (2017)
- Maersk lost 200-300 USD

Protection of privacy

- “Se og Hør” scandal (2016)



Four course themes

A. Computer security technology and principles

- cryptography, user auth., viruses, worms, ..

B. Software and system security

- design to prevent ..
- .. buffer overflow attacks, IoT attacks

C. Management issues

- implement routines and standards (GRPR, ISO 27000)
- risk analysis
- human resources, social engineering,

D. Network security

- cases
- credit card systems, mobile payment systems, ..

IT security: basic info

Course day

- Monday
- 13.15 - 17.00

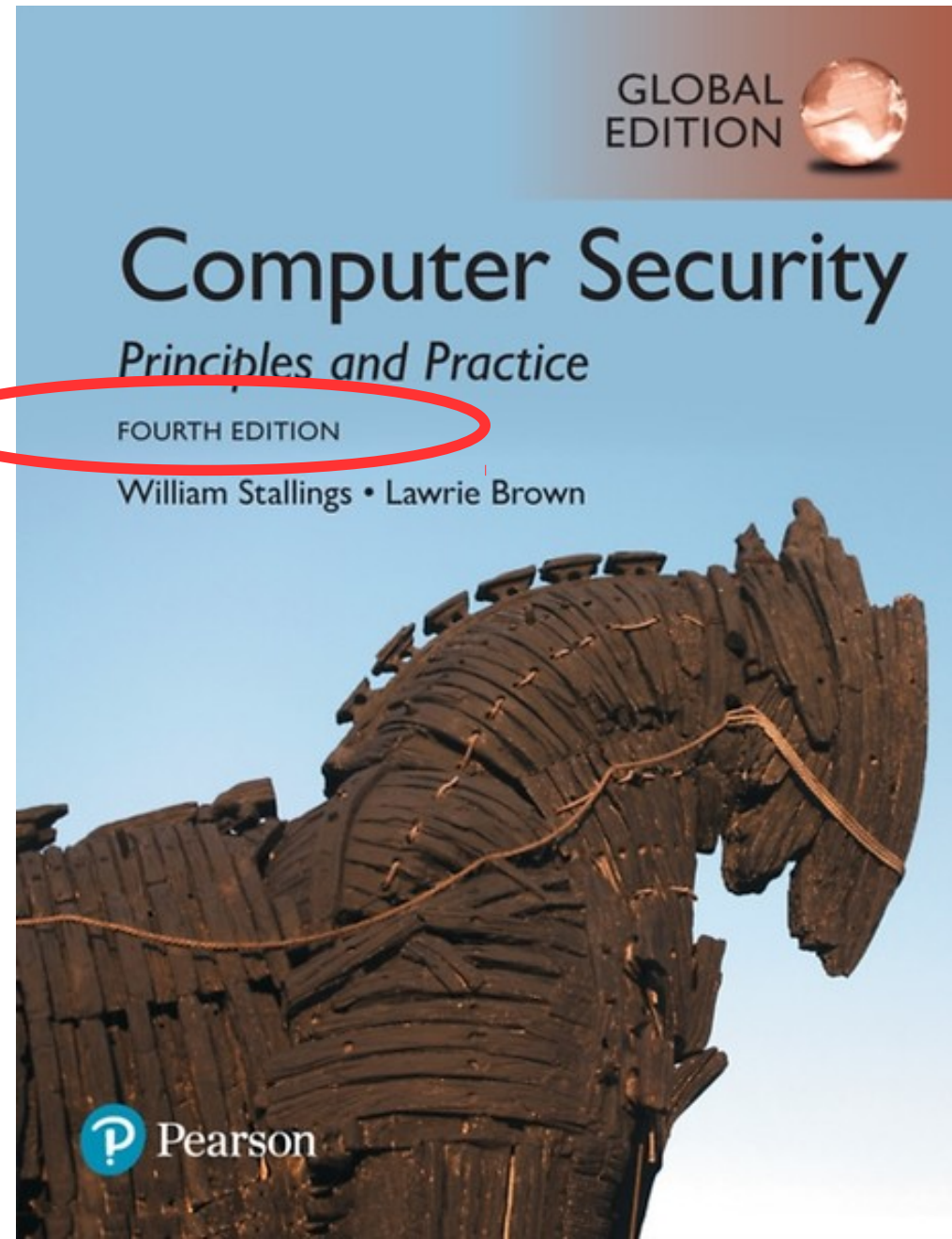
Teachers

- Niels Jørgensen
(nielsj@ruc.dk)
- Niels Christian Juul



Please note:

- 4/E, 2018
- Global Edition



Example course day: Monday 11th Feb

Course intro

Theme A: Computer security technology and principles

Case:

- NotPetya attack

Teacher's presentations

On all subsequent course days,
there will also be 1-3 short student presentations

Exercises

20-minute oral exam based on a written assignment

Oral exam

- the student selects a random question
- among 20 questions
- 3-5 minutes presentation, using written assignment
- Q/A about the question

Teachers present 20 questions

- two questions each course day
- “In the NotPetya attack, how was encryption used?”
- “Following the NotPetya attack, what were the management lessons?”

Written assignment

- 2-4 pages
- presents main points for each of the 20 questions
- main points = topics, headlines for an oral presentation
- assignment is an incentive to prepare yourself for the oral exam