### **Advanced Networking**

**Course Introduction** 

Antonio Carzaniga

Faculty of Informatics Università della Svizzera italiana

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#### Outline

- General course information
- Program
- Preliminary schedule
- A preview of Advanced Networking

#### **General Information**

- On-line course information
  - INFO.ADV-NTW20 on iCorsi
  - and on my web page: http://www.inf.usi.ch/carzaniga/edu/adv-ntw/

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  - through iCorsi
  - and http://www.inf.usi.ch/carzaniga/edu/adv-ntw/news.html

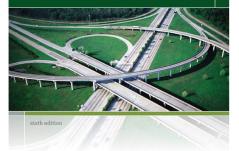
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  - and http://www.inf.usi.ch/carzaniga/edu/adv-ntw/news.html
- Office hours
  - Antonio Carzaniga: by appointment

#### **Textbooks (1)**

#### Computer Networking

A Top-Down Approach



KUROSE ROSS

#### Computer Networking A Top-Down Approach

James F. Kurose Keith W. Ross

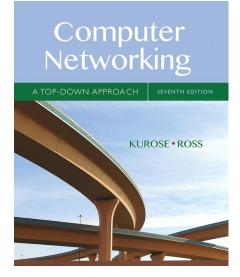
Addison-Wesley

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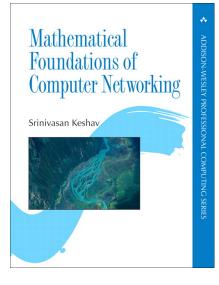


#### **Textbooks (2)**

#### Mathematical Foundations of Computer Networking

Srinivasan Keshav

Addison-Wesley Professional



#### **Evaluation**

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- +40% homework assignments and/or paper reading and presentation
  - at least three graded assignments/presentations
  - grades added together, thus resulting in a weighted average
- +30% midterm exam
- +30% final exam
- ±10% instructor's discretionary evaluation
  - participation
  - extra credits
  - trajectory
  - ▶ ...

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Using someone else's material may be appropriate

- e.g., software libraries
- always clearly identify the external material, and acknowledge its source; failing to do so means committing plagiarism.
- the work will be evaluated based on its added value

- Committing plagiarism on an assignment or an exam will result in *failing that* assignment or that exam
- Penalties may be escalated in accordance with the regulations of the Faculty of Informatics

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  - only for documented medical conditions or other documented emergencies

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  - corollary: the grade of an assignment turned in more than two days late is 0

Part 2

## What this course is about

You thought computer networking is simple?!

### Program

Linear Algebra and Applications	(AC)	2
Probability Theory and Applications	(AC)	2
Queuing Theory	(AC)	2
Optimization	(RS)	2
Network Design and Traffic Engineering	(RS)	2
Security	(AC)	2
Network Architectures	(AC)	1
midterm exam		
Network Programming and In-Network Processing	(RS)	5
Application Protocols	(AC)	1
Transport Protocols	(AC)	1
Applications	(RS)	2
Link Layer and Wireless	(AC)	1