Redes de Comunicação 2024/2025

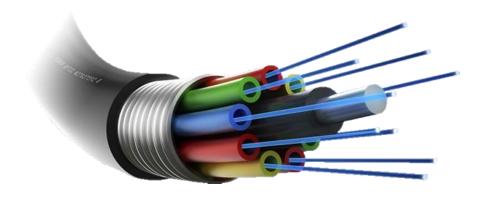
T00 Course Presentation

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Outline

- I Organization
- 2 Challenges
- 3 Goals
- **4** Course contents
- 5 Schedule (T and TP)
- 6 Schedule (PL)
- 7 Evaluation rules
- 8 Bibliography



Organization

T, TP and PL classes

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PL classes

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Challenges!

Is it possible to understand how the Internet works?

The Internet is arguably the largest engineered system ever created by the mankind! Billions of users connect via laptops, tablets, smartphones, also Internet-connected devices (servers, sensors, web cams, game consoles, etc.)

Are there any guiding principles and principles that can provide a foundation to help us in this process?

The Internet is such a large and complex system!

Are networking technologies and tools interesting and fun to learn and use?

Course contents

- I. Computer Networks and the Internet
- 2. Application Layer
- 3. Transport Layer
- 4. Network Layer
- 5. Link Layer
- 6. Network security
- 7. Wireless and Mobile
- 8. Multimedia Networking
- 9. Network Management

Schedule (T and TP classes)

3-Feb-2025	Computer Networks and the Internet (1)
10-Feb-2025	Computer Networks and the Internet (2)
17-Feb-2025	Application Layer (1)
24-Feb-2025	Application Layer (2)
3-Mar-2025	Transport Layer (I)
10-Mar-2025	Transport Layer (2)
17-Mar-2025	Transport Layer (3)
24-Mar-2025	Network Layer (1)
31-Mar-2025	Network Layer (2)
7-Apr-2025	Network Layer (3)
14-Apr-2025	Férias páscoa
21-Apr-2025	Feriado
28-Apr-2025	Link Layer (I)
5-May-2025	Link Layer (2)
12-May-2025	Wireless security
19-May-2025	

Schedule (PL classes)

3-Feb-2025	Introdução ao GNS3
10-Feb-2025	Apoio Ficha I
17-Feb-2025	Apoio Ficha 1/2
24-Feb-2025	Apoio Ficha 2
3-Mar-2025	Apresentação e apoio TP
10-Mar-2025	Apoio Ficha 3
17-Mar-2025	Apoio Ficha 3 / TP
24-Mar-2025	Defesas Ficha 3
31-Mar-2025	Apoio Ficha 4
7-Apr-2025	Avaliação Meta 1 TP
14-Apr-2025	Férias Páscoa
21-Apr-2025	Defesas Ficha 4
28-Apr-2025	Apoio Ficha 5
5-May-2025	Avaliação Ficha 5
12-May-2025	Apoio TP
19-May-2025	Defesas TP

Evaluation Rules

Exams: 10 points (in 20)

- Final Exam: 10 points
- Pass threshold: 40% (of total grade)
- Plagiarism implies exclusion from course (Não Admitido)

Practical component of the course:

- Four (4) projects to be performed in groups of 2 students, total of 4 points
- Practical assignment (in groups of 2 students): 6 points (in 20)
- Pass threshold of the practical component (Lab projects + Practical assignment): 40%

Bibliography

J. Kurose and K. Ross, "Computer Networking – a top-down approach", Pearson.

W. Richard Stevens, "TCP/IP Illustrated", Addison-Wesley.

Richard Stevens "Unix Network Programing", Prentice Hall International.

(other documentation recommended during the semester)

