

Final Exam (1)

- Wednesday, 4th December, 08:45 – 11:00
- Check seating arrangement
- Time: 2 hours + 10 minutes (reading time)
- Maximum Marks: 40
- Recall that, to pass the course, one requirement is that you must score ≥ 16 marks (40%) in the final exam

```
lab = marks for lab exercises (scaled to 20)
assign = marks for the programming assignment (out of 20 marks)
midTerm = mark for the mid-term exam (out of 20 marks)
finalExamScaled = scaled mark for the final exam (out of 40 marks)
mark = lab + assign + midTerm + finalExamScaled
grade = HD|DN|CR|PS if mark  $\geq 50$  && finalExamScaled  $\geq 16$ 
      = FL          if mark  $< 50$ 
      = UF          finalExamScaled  $< 16$ 
```

Final Exam (2)

- Closed book
- What to bring
 - Student ID
 - Calculator will NOT be provided. BYO - GET THEM APPROVED (FACULTY OFFICE)
 - Pen, Pencil, etc.

Final Exam (3)

- Not a memory test, questions will examine your understanding of concepts
- Tests your understanding
- Tests whether you can apply the principles in a situation that you haven't seen before
- You can use the mid-session exam as a guide on what the expectations are

Final Exam (4)

- **Syllabus: Comprehensive**
 - See the next few slides for content on the exam
 - More focus on the material after the mid-semester exam
 - Self-study material is **not** examinable
 - External links, News Items and Research Items discussed in lectures **not covered**
 - Questions may also examine multiple layers at the same time
 - No questions on programming or lab exams
 - However reading through the lab exercise solutions may be instructive for understanding certain concepts
- You are **asked to show your steps** and **tell us your arguments in answering questions**

Final Exam (5)

- How to **prepare?**
 - **Read** and **thoroughly understand** all content
 - **Practice, Practice, Practice**
 - Go through all the **sample questions**, **sample exam papers**, **lecture Q&A**, textbook questions, etc. for practice
- Don't panic and get stressed if you come across a hard question

NOTE: Sample final exam paper has been posted on the Final Exam Page linked to course webpage

Examinable Content (1)

❑ Introduction and Overview

- No specific questions but the general concepts may be examined in some questions
- No direct questions on circuit/packet switching

❑ Application Layer

- 1 question on HTTP, some applications may be referenced in other questions
- General understanding of applications should be sufficient
- No questions on DHT or peer to peer networks

Examinable Content (2)

□ Transport Layer

- All content is examinable
- No questions on finite state machines (RDT, TCP)

□ Network Layer

- All content is examinable excluding the following:
 - Router internals
 - IPv6 (general content of tunneling may be examined)
 - ICMP
 - Specific routing protocols such as BGP, OSPF, RIP, etc
 - SDN (centralized control plane)

Examinable Content (3)

□ Link Layer

- All content is examinable excluding the following:
 - CRC Arithmetic
 - DOCSIS: Link layer for Cable Internet Access
 - Virtual LANs
 - Link Virtualization
 - Data Centers

□ Wireless Networks

- Wireless Links and Network characteristics, WiFi, 802.11 MAC are all included

Examinable Content (4)

□ Network Security

- Symmetric and Public key cryptography
 - General questions only, no math questions, you don't need to know details of AES/DES
- Message Integrity and Digital Signatures
- End-Point Authentication