

The Final Exam covers the material of Topics 5, 6, 7, 8, and 9 of the course outline.

Please review the assigned readings from the textbook along with the corresponding lecture notes and audio lectures as well as the assigned review questions and homework problems. Make sure that you understand the terminology and concepts introduced on each page of the lecture notes and can explain them in 1-3 sentences.

The format of the exam will be problems and definitions similar in style and complexity to the assigned review questions and homework problems.

There will be four problems on the exam covering the following areas:

1. Topic 9: Wireless LANs
 - Key Terms
 - Review Questions
 - The IEEE 802.11 Standard
 - Contention Service vs. Contention Free Service
 - DCF and PCF Functions

2. Topic 5, Topic 6, Topic 7:
 - Key Terms
 - Review Questions
 - High Speed LANs: Alternatives
 - High Speed LAN Encoding Methods
 - LAN Bridges: Functions
 - Spanning Tree Approach
 - Hubs and Switches: Functions
 - Store-and-Forward Switches vs. Cut-through Switches

3. Topic 8: Virtual LANs
 - Key Terms
 - Review Questions
 - VLAN Purpose and Functions
 - IEEE 802.1Q VLAN Standard

4. Topic 9: Wireless LANs
 - Key Terms
 - Review Questions
 - IEEE 802.11 Architecture
 - Spread Spectrum Communications
 - Services
 - Physical Layer Alternatives
 - IEEE 802.11i Security Architecture
 - WEP vs. WPA