

CSCE 463/612

Networks and Distributed Processing

Spring 2018

Preliminaries

Dmitri Loguinov

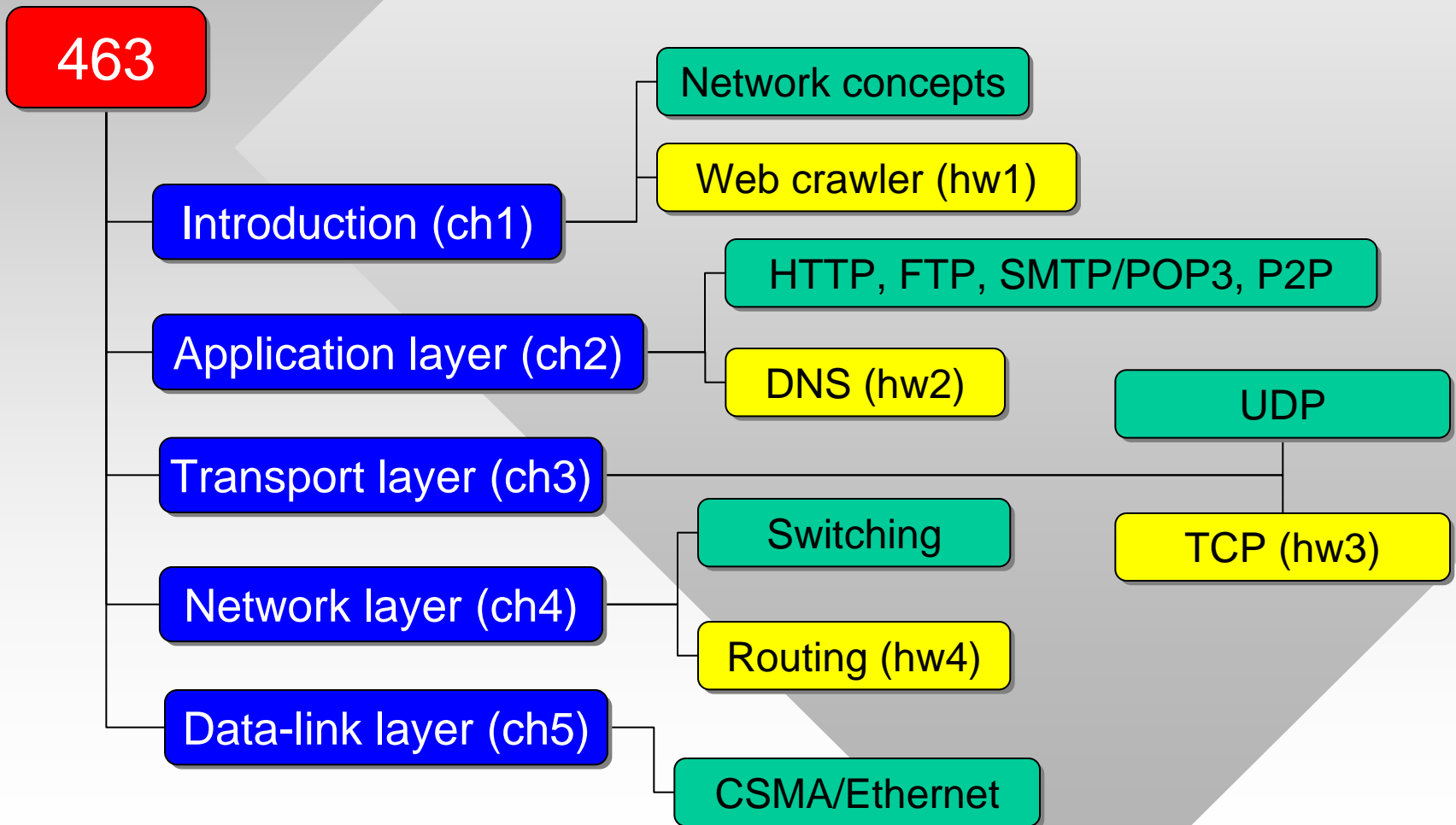
Texas A&M University

January 16, 2018

Agenda

- Roadmap
- Syllabus
- Academic integrity
- Homework expectations
- Visual Studio
- Wrap-up

Course Roadmap



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- Roadmap
- **Syllabus**
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Syllabus

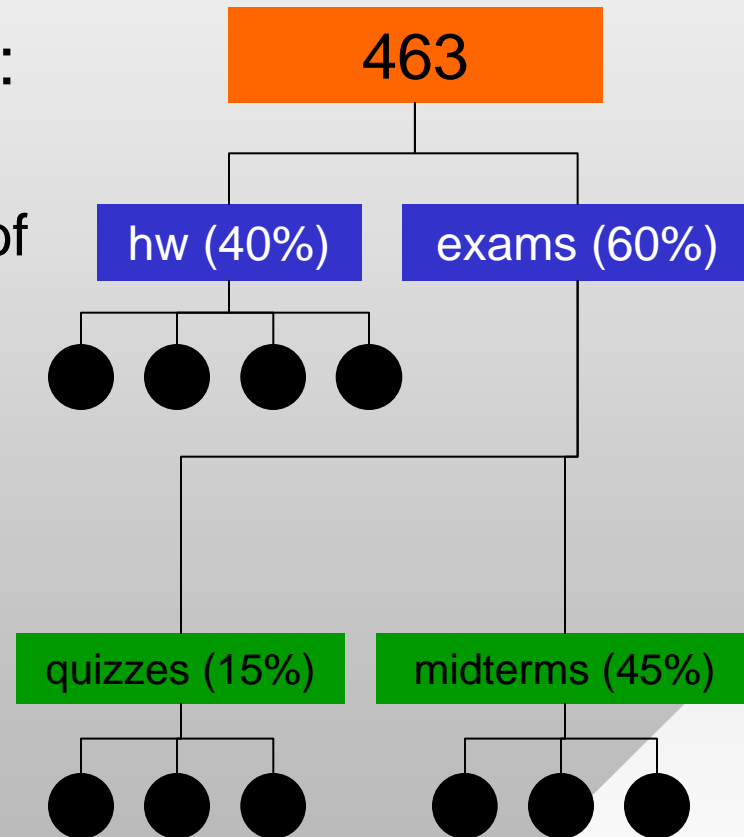
- Instructor: **Dmitri Loguinov**
 - Office hours: TR 6:45-7:45pm in HRBB 515C
- TA: **Matthew Wiecek**
 - Office hours: MW 3-4pm in HRBB 501C
- Main text:
 - J.F. Kurose and K.W. Ross, “Computer Networking: A Top-Down Approach,” Addison-Wesley, 7th edition, 2016
- Website: <http://irl.cse.tamu.edu/courses/463>
 - Slides and future test dates
 - Homework assignments
 - Links to useful material
- Piazza: <http://piazza.com/tamu/spring2018/csce463>

Syllabus 2

- Must use Visual Studio 2017 + Win 10.0.16299 SDK
 - Download from Dreamspark (see <https://engineering.tamu.edu/cse/cse-internal/microsoft-dreamspark-for-academic-institutions>)
 - Or get a Community Edition from Microsoft
- Prerequisites
 - CSCE 313: Computer Systems
 - Multi-threading and synchronization
 - CSCE 312: Computer Organization
 - CSCE 221: Data Structures and Algorithms
 - Queues, sets, hash tables, trees
 - **Working** knowledge of C/C++ and pointers
- Expect heavy coding

Syllabus 3

- Homework (40% of final grade):
 - 4 programming assignments
 - Each explores a different aspect of computer networks
- Exams (60% of final grade):
 - **Closed-book, no cheat-sheets**
 - 3 quizzes (15% of final grade):
 - Problems from each chapter
 - 3 midterms (45% of final grade):
 - Lecture/homework topics



Syllabus 4

- Grade distribution
 - 80-100% (A), 70-79% (B), 60-69% (C), 50-59% (D), 0-49% (F)
- **You cannot pass the class without doing homework**
- Student type A: emails for every simple issue
 - How to create a project, start a program, linker errors
 - Instructor ends up googling and sending results back
- Student type B: never asks for help
 - Spends hours or days being stuck on the same problem
- Best route lies somewhere in between
 - Realize that others might have experienced similar problems (e.g., stackoverflow has tons of useful answers)
 - Perform initial investigation, obtain insight into the issue

Syllabus 5

- If nothing useful emerges in 10 minutes, ask for help
 - Through piazza (general concepts) or email (code-specific)
 - During class
 - Office hours (bring a laptop)
- If problem is solved, answer your own question!
 - Help others on piazza
- If emailing
 - Provide a clear description of the problem, where it occurs, and what you have done to debug it
- Read my tutorial on pointers, debugging, APIs
 - Call stack, breakpoints, immediate/watch/thread window, common debugging techniques, stepping thru code

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Academic Integrity

- No teamwork is allowed
 - General discussion is acceptable, but **no part** of an assignment may be copied from another student
- Academic Rules, Section 20
 - All sources must be properly **acknowledged** (including MSDN examples and sample code)
 - No information may be copied from the Internet, books, or elsewhere; all work must be **original**
 - Do not use last year's homework
 - Do not hire people to write it for you
- **All** parties involved in cheating will be punished equally
 - **Any occurrence: F* in class or expulsion from university**

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Homework

- Homework:
 - Due at **noon**, 20% penalty per day (no points after 5 days)
 - Delays for personal reasons must be requested **in advance**
- Provide a detailed written report
 - **If multiple parts to hw, only the last one needs a report**
 - Answer questions posed in the problem statement
- Sample runs
 - Capture screenshots or print into a file details of what your code does on test input data
- Goal: demonstrate in your report that you **understood** the material

Homework 2

- **Hard copy:**
 - Both report and code must be submitted before class starts
- **Soft copy:**
 - Add a comment to the top of each cpp/h file with your full name, class, and semester (e.g., CSCE 463-500 Spring 2018)
 - Create a zip *preserving the directory structure* and containing only *.sln, *.cpp, *.h, *.lib, *.vc*proj*, [delete everything else](#)
 - Upload to `csnet.cse.tamu.edu`
- **Department servers for this class**
 - `ts.cse.tamu.edu` and `ts2.cse.tamu.edu`
 - Use Windows Remote Desktop client to login
 - Homework 4 requires admin permissions, but hw1-hw3 can be run on the servers (but things might get slow)

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Wrap-up

- Homework #1 is due in three parts:
 - Part 1 (1/23/18 **next Tuesday!**): load a single page
 - Part 2 (1/30/18): crawl a list of pages with one thread
 - Part 3 (2/13/18): multi-threaded crawler
- **Suggestions:**
 - Read my programming tutorial and hw1p1
 - Formulate questions about either
 - Experiment with VS 2017
 - Ask questions on Thursday