Syllabus

Network and Data Communication Systems Course (BACS 380) – Fall 2019

This page contains the syllabus for Network and Data Communication Systems for Fall 2019. “The course syllabus contains important information regarding course requirements and the grading system utilized. It is the responsibility of the students to read the syllabus and consult the instructor if they have questions.” (from UNC Undergraduate Catalog)

Course: BACS 380 025: Network and Data Communication Systems, Fall 2019 – 3 credits

Class Meeting Time and Location: Tuesday and Thursday, 11:00am – 12:15pm in Kepner Hall 0075

Instructor: Mehrgan Mostowfi, Ph.D. (mer-gone mos-tow-fee)

Department: Accounting and CIS, Monfort College of Business

Email: mehrgan.mostowfi@unco.edu

Homepage: http://mcb.unco.edu/departments/computer-information-systems/mostowfi-mehrgan.aspx

Office Location: Kepner Hall 0095C

Office Hours: See below, and the next page for a complete list of office hours by week:

- Every week on Tuesday and Thursday, 9:30am to 11:00am
- Every other week on Monday, 1:30pm to 3:30pm starting Monday, September 2, 2019
- Every other week on Wednesday, 1:00pm to 3:00pm starting Wednesday, August 28, 2019
- By appointment

Catalog Course Description: This is an activity course involving the study of data communications and networks. Topics include history, media, hardware, software, standards, networks, analysis and design, distributed processing and network management.


Prerequisites:

- Business majors/minors and Software Engineering majors only.
- Juniors or above.

Course Objectives:

1. Provide the student with a professional, working data communications vocabulary.
2. Provide the student with a technical foundation in data communications hardware, software, and concepts.
3. Provide the student with fundamentals of data communications system design and evaluation.
4. Provide the student with a fundamental knowledge of local, value added, and wide area networks.
5. Qualify the student for more advanced education in the data communications field.
6. Enhance the student's analytic skills.

MCB Assurance of Learning Goals and Objectives:

<table>
<thead>
<tr>
<th>Learning Goal</th>
<th>Learning Objective</th>
<th>Course Coverage</th>
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<tbody>
<tr>
<td>Be knowledgeable of key concepts in core business curriculum</td>
<td>Students will demonstrate a firm understanding of core business concepts.</td>
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Be effective communicators
Students will prepare and deliver quality presentations on a business topic. Objective 5

Demonstrate conceptual and analytical skills
Students will analyze data & information to identify key problems, generate and evaluate appropriate alternatives, and propose a feasible alternative. Objective 6

Be proficient with technology
Students will prepare quality business documents. Objectives 1, 2, 3, 4, 5, 6

Demonstrate ethical awareness
Students will be knowledgeable about ethics and social responsibility. Objectives 2, 3

Be proficient with discipline-specific knowledge
Students will demonstrate a firm understanding of discipline-specific knowledge within their emphasis. Objectives 1, 2, 3, 4, 5, 6

Course Schedule and Office Hours: This course will cover the following topics:

- Week 1 (August 26 – September 1): Introduction to Networks
  - Office hours: Tuesday – 9:30am to 11am, Wednesday – 1:00pm to 3:00pm, Thursday – 9:30am to 11am.
- Week 2 (September 2 – September 8): The OSI and TCP/IP Models, Communication Protocols
  - Office hours: Monday – 1:30pm to 3:30pm, Tuesday – 9:30am to 11am, Thursday – 9:30am to 11am.
- Week 3 (September 9 – September 15): The Application Layer protocols
  - Office hours: Tuesday – 9:30am to 11am, Wednesday – 1:00pm to 3:00pm, Thursday – 9:30am to 11am.
- Week 4 (September 16 – September 22): Socket Programming
  - Office hours: Monday – 1:30pm to 3:30pm, Tuesday – 9:30am to 11am, Thursday – 9:30am to 11am.
- Week 5 (September 23 – September 29): HTTP
  - Office hours: Tuesday – 9:30am to 11am, Wednesday – 1:00pm to 3:00pm, Thursday – 9:30am to 11am.
- Week 6 (September 30 – October 6): DNS, Exam 1
  - Office hours: Monday – 1:30pm to 3:30pm, Tuesday – 9:30am to 11am, Thursday – 9:30am to 11am.
- Week 7 (October 7 – October 13): The Transport Layer Protocols
  - Office hours: Tuesday – 9:30am to 11am, Wednesday – 1:00pm to 3:00pm, Thursday – 9:30am to 11am.
- Week 8 (October 14 – October 20): UDP, TCP
  - Office hours: Monday – 1:30pm to 3:30pm, Tuesday – 9:30am to 11am, Thursday – 9:30am to 11am.
- Week 9 (October 21 – October 27): The Network Layer, IP Addressing
  - Office hours: Tuesday – 9:30am to 11am, Wednesday – 1:00pm to 3:00pm, Thursday – 9:30am to 11am.
- Week 10 (October 28 – November 3): CIDR and Classfull Subnetting
  - Office hours: Monday – 1:30pm to 3:30pm, Tuesday – 9:30am to 11am, Thursday – 9:30am to 11am.
- Week 11 (November 4 – November 10): DHCP, NAT
  - Office hours: Tuesday – 9:30am to 11am, Wednesday – 1:00pm to 3:00pm, Thursday – 9:30am to 11am.
- Week 12 (November 11 – November 17): Network Media, Topologies, Exam 2
  - Office hours: Monday – 1:30pm to 3:30pm, Tuesday – 9:30am to 11am, Thursday – 9:30am to 11am.
- Week 13 (November 18 – November 24): Network Media, Topologies, Switched LANs
  - Office hours: Tuesday – 9:30am to 11am, Wednesday – 1:00pm to 3:00pm, Thursday – 9:30am to 11am.
- Week 14 (November 25 – December 1): Link-Layer Switches (No class on Thursday – Thanksgiving)
  - Office hours: Monday – 1:30pm to 3:30pm, Tuesday – 9:30am to 11am, Thursday – 9:30am to 11am.
- Week 15 (December 2 – December 8): MAC Addresses, ARP, Summary: A day in the life of a Web page request
  - Office hours: Tuesday – 9:30am to 11am, Wednesday – 1:00pm to 3:00pm, Thursday – 9:30am to 11am.
- Week 16 (December 9 – December 15): No class, comprehensive final exam
Grading: Students will earn a grade based on assignments, exams, and a comprehensive final exam. The grade breakdown is:

- Assignments: 20% (given after completing each major topic)
- Exam 1: 20% (the exact date will be announced)
- Exam 2: 25% (the exact date will be announced)
- Comprehensive final exam: 35% (held in class on Monday, December 9, 10:45am – 1:15pm)

The grading scale is “no worse than”:

- A = 90.00% through 100% and above
- B = 80.00% through 89.99%
- C = 70.00% through 79.99%
- D = 60.00% through 69.99%
- F = Less than 59.99%

Important Dates:

- Add Deadline on URSA: Friday, August 30, 2019
- Drop Deadline on URSA: Monday, September 9, 2019
- Course Withdrawal Deadline: Thursday, October 17, 2019

Course Policies:

- I expect you to make sure your UNCO email works and check your email regularly. Email will be the main means of communication between you and me. Not having checked your email will not be accepted as an excuse for missing due dates and other important information.
- If you must submit work late you need to talk to me at least one week before the due date in question. Otherwise, late work cannot be accepted except in cases of verifiable emergencies.
- Attending class is mandatory and very important. I may choose to track attendance.
- Incomplete (“I”) grades will only be given in the case of severe hardship including verifiable medical emergencies or legal troubles. Simply being “overloaded” and unable to complete your work is not grounds for an “I” grade.


- Assessment Statement
- Classroom Technology Guidelines
- Computer Utilization
- Ethical Dimension Coverage
- Food and Beverage Guideline
- Global Dimension Coverage
- Library Utilization
- MCB Statement
- Monfort College of Business Student Code of Professional Conduct
- Students with Disabilities

Last Update: July 2, 2019
Every part of this syllabus is subject to adjustment as the semester progresses.