Syllabus
Networking and Data Communications Systems (BACS 380) – Spring 2020

This page contains the syllabus for Network and Data Communication Systems for Spring 2020. "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 380 003 - Network and Data Communication Systems, Spring 2020 – 3 credits

Class meeting time and location: Mondays, Wednesdays, and Fridays, 9:05am – 9:55am in Kepner Hall 0075

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

Department: Accounting and CIS, Monfort College of Business

Office location: Kepner Hall 0095C

Office hours:
- Mondays, Wednesdays, and Fridays 2:20pm – 4:00pm in Kepner Hall 0095C
- By appointment (email to schedule an appointment)

Email: mehrgan.mostowfi@unco.edu

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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</thead>
<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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<tr>
<td>Be effective communicators</td>
<td>Students will prepare and deliver quality presentations on a business topic.</td>
<td>Objective 5</td>
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<td></td>
<td>Students will prepare quality business documents.</td>
<td>Objective 5</td>
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<tr>
<td>Demonstrate conceptual and analytical skills</td>
<td>Students will analyze data &amp; information to identify key problems, generate and evaluate appropriate alternatives, and propose a feasible alternative.</td>
<td>Objective 6</td>
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</tbody>
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### Course topics: This course will cover the following topics:

- **Week 1 (January 13 – January 19):** Introduction to Networks, The TCP/IP Model, Communication Protocols
- **Week 2 (January 20 – January 26):** The Application Layer protocols
- **Week 3 (January 27 – February 2):** Socket Programming
- **Week 4 (February 3 – February 9):** Socket Programming, HTTP
- **Week 5 (February 10 – February 17):** The Transport Layer Protocols, UDP
- **Week 6 (February 17 – February 24):** TCP, **Exam 1**
- **Week 7 (February 24 – March 3):** UDP, TCP
- **Week 8 (March 2 – March 10):** TCP, The Network Layer, IP Addressing
- **Week 9 (March 9 – March 17):** CIDR Notation and Classful Subnetting
- **Week 10 (March 16 – March 24):** No class, **Spring Break**
- **Week 11 (March 23 – March 31):** DHCP, NAT
- **Week 12 (March 30 – April 7):** DNS, Routing
- **Week 13 (April 6 – April 14):** Link-Layer, MAC Address, **Exam 2**
- **Week 14 (April 13 – April 21):** Network Media, Topologies, Switched LANs
- **Week 15 (April 20 – April 28):** MAC Addresses, ARP, VLANs
- **Week 16 (April 27 – May 3):** Summary: A day in the life of a Web page request
- **Week 17 (May 4 – May 10):** No Class, **Comprehensive Final Exam**

### Grading: Students will earn a grade based on assignments, exams, and a comprehensive final exam. The breakdown is:

- **Assignments:** 15% (given after completing each major topic)
- **Class Assignments:** 10%
- **Exam 1:** 20% (the exact date will be announced)
- **Exam 2:** 25% (the exact date will be announced)
- **Comprehensive final exam:** 30% (held in class on Wednesday, May 6, 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%**

### Other Important Dates:

- Add Deadline on URSA: 01/17/2020
- Drop Deadline on URSA: 01/27/2020
- Course Withdrawal Deadline: 03/09/2020
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

Networking Night – 02/19/2020 | 5:30PM—7:00PM | Kepner Hall – Networking Night’s focus is bringing together business students and business professionals from various industries to help build students’ soft skills and learn about different organizations and available career paths. **Sophomore and Junior Business Administration students are required to attend Networking Night, occurring Wednesday, February 19, 2020, from 5:30PM—7:00PM in Kepner Hall.** All business students are encouraged to attend in order to broaden their professional network.

If an irresolvable conflict or emergency prevents a student from attending Networking Night, that student should contact Melissa Hoffman (melissa.hoffman@unco.edu) | (970) 351-4589) for an alternative assignment. For questions or additional details about Networking Night, please see the Networking Night website (www.mcb.unco.edu/students/networking-night) or contact Melissa Hoffman (melissa.hoffman@unco.edu) | (970) 351-4589).

Spring Job & Internship Fair – 02/20/2020 | 1:00PM—4:00PM | University Center – Center for Career Readiness hosts a campus-wide Job & Internship Fair each semester, connecting soon-to-be graduates with employment opportunities. **Senior Business Administration students are required to attend the spring fair, occurring Thursday, February 20, 2020, from 1:00PM—4:00PM in the University Center.** All business students are encouraged to attend, especially those seeking internship opportunities. Business Administration students should check-in once at the fair in order to record their attendance.

If an irresolvable conflict or emergency prevents a student from attending the fair, that student should contact Melissa Hoffman (melissa.hoffman@unco.edu) | (970) 351-4589) for an alternative assignment. For questions or additional details about the Job & Internship Fair, please contact Center for Career Readiness (www.unco.edu/careers | (970) 351-2127).

Last Update: January 7, 2020

*Every part of this syllabus is subject to adjustment as the semester progresses.*