The objective of this course is to provide a basic understanding of the technical and management aspects of business data communications and networking. Upon completion of this course you should be able to:

- Explain how networks such as the Internet transfer data from one device to another through the different hardware and software components.
- Design networks using a variety of Local Area Network, backbone, and Wide Area Network technologies and components.

Grading Scheme:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Quizzes</td>
<td>25%</td>
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<tr>
<td>Final Exam</td>
<td>25%</td>
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<tr>
<td>Team Project/Labs</td>
<td>30%</td>
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<tr>
<td>Homework</td>
<td>20%</td>
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<td>100%</td>
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Please do not hesitate to contact me if you have any questions, problems or concerns. Email is the best way to get ahold of me followed by my Cell phone. I will get back with you as soon as I possibly can.

Details regarding class assignments, projects and quizzes will be discussed in class. Since this class will cover a large amount of information in a short period of time we will need to adhere to the schedule provided. This course will require a great deal of reading due to the amount of information we are covering. Please follow the schedule and have the assigned chapters read before class. It will help with your comprehension and the retention of the material. If you have an emergency and will not be able to attend class, please contact me immediately so we can discuss arrangements to make up any missed assignments. Again we only have 7 class meetings so it is imperative that you attend every class. My goal is for you to succeed in this course so please reach out to me if something comes up.

Inclement Weather: This past year the University did shut down on multiple occasions due to inclement weather. In the event that classes are canceled, any assignments due on the day of class can be emailed to me. I will provide all the class materials for the missed class period as well. Quizzes and Exams will be rescheduled.

Tentative Schedule

1. Introduction to Networking March 4
A. History of Internet  
B. Types of Networks  
C. Components of Network  
D. Network Models  
   1. OSI  
   2. Internet Model  
   3. MTU Layers  
E. Network Standards  
   1. IEEE  
   2. ISO  
   3. FCC  
   4. WIFI Alliance  

II. Network Fundamentals March 11  
A. Physical Layer  
B. Data Link Layer  
C. Network Layer  
D. Transport Layer  
E. Application Layer  
   1. Session  
   2. Presentation  
   3. Application  

III. Network Technologies March 25  
A. LANs  
   1. Wired  
   2. Wireless  
B. WANS  
C. Backbone Networks  
D. The Internet  

IV. Network Design & Network Management April 1  
V. Network Security April 1  
VI. Class Presentations of Group Projects April 8  
VII. Review for Final April 15  

Homework

All homework is due at Midnight the night before class. The responses need only be a paragraph or two.

<table>
<thead>
<tr>
<th>Date</th>
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<tr>
<td>4-Mar</td>
<td>EOC 8 and 9</td>
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<td>Date</td>
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<tr>
<td>11-Mar</td>
<td>BB Wk2</td>
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<td>25-Mar</td>
<td>BB Wk3</td>
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<td>1-Apr</td>
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<td>8-Apr</td>
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<td>15-Apr</td>
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<td>22-Apr</td>
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**Quizzes/Exams:**

There will be four in class quizzes, a mid-term exam and a final exam. These quizzes and exams are open book but are not a collaborative effort. Quizzes will be taken on-line using Canopy. Students are responsible for bringing their own laptop to class to take the quizzes/exams. Please make sure the batteries are charged.

**Network Team Projects:**

Over the course of the semester we will have time allocated at the end of class to work on Labs. I would like to break into 5 groups based on the number of students enrolled. **All students must submit the lab report in order to receive credit.** In addition, there is a group project that consists of a 15 minute presentation on “Trends in Computer Networking.” Some valid presentations would be about Software Defined Networking, BYOD or Wireless networks. The presentations will be performed at the final class meeting. You must supply at least three references. Wikipedia is not an acceptable reference. The presentation will be graded by your peers.

**Academic Honesty:**

As with all Lindner College of Business efforts, this course will uphold the highest ethical standards, critical to building character (the C in PACE). Ensuring your integrity is vital and your responsibility. LCB instructors are required to report ANY incident of academic misconduct (e.g., cheating, plagiarism) to the college review process, which could result in severe consequences, including potential dismissal from the college. For further information on Academic Misconduct or related university policies and procedures, please see the UC Code of Conduct [here](http://www.uc.edu/ucinfo/conduct.html).

**Grade Scale:**

- 93 - 100%  A  73 - <77%  C
- 90 - <93%   A-  70 - <73%  C-
- 87 - <90%   B+  67 - <70%  D+
- 83 - <87%   B   63 - <67%  D
- 80 - <83%   B-  60 - <63%  D-
- 77 - <80%   C+  0 - <60%  F