

**University of Texas at El Paso**  
**Electrical and Computer Engineering**  
**Introduction Communication Networks**  
**EE5330, Spring 2015**

INSTRUCTOR:	Virgilio Gonzalez
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OFFICE HOURS:	Mon 10:00 – 11:00 AM, Tue 3:00 – 4:30 PM or by appointment
TEXTS:	William Stallings, “ <i>Data and Computer Communications</i> ”, 10 <sup>th</sup> Edition, Prentice Hall

**Course Outcomes**

1. Analyze Digital Transmission Links (I)
2. Understand Fundamentals of Low Level Protocols (C)
3. Characterize the performance of communication systems (I)
4. Design Basic Communication Networks (C)
5. Use computer simulation tools for the analysis of communication systems (C)

**Content Material**

Item #	Topic	Chapter Reading
1	Data Communications Overview	1 , *
2	Layering Protocol Model	2
3	Physical Layer, Physical Media	4
4	Properties of Signals, Analog & Digital	3
5	Signal Encoding, Analog Modulation	5 , *
6	Digital Baseband Transmission	5 , *
7	Fiber Optic Link Analysis	4, 5 , *
8	Digital Modulation	5 , *
9	Coding, Error Detection and Correction	6
10	Data Link, Point to Point	7
11	Multiplexing	8
12	Switched and Cellular Networks	9, 10
13	FR & ATM	9
14	Local Area Networks (Contention based)	11 , 12
15	Wireless LAN and WAN	13, 18
16	IP and Routing (Network Layer)	14
17	Transport layer and upper applications	15 , *
18	Selected Topics along major chapters	*

\* Correspond to supplementary material

## GENERAL COURSE POLICIES

- Samples of student work will be collected for quality assurance purposes. Please notify the professor, in writing, if there is any confidentiality requirement.
- The Professor will be available only during the assigned office hours or by appointment; however there will be frequent response to posted questions in BlackBoard.
- Most homework, Special Problems and other assignments will be solved online with **BlackBoard**.
- A BlackBoard (<https://my.utep.edu/myhome.aspx>) account is required. They normally already exist. If you don't know your account and password, please check with the Help Desk in extension 4357 (or 747-5257 off campus)
- Each piece of written work must have **name**, student **ID**, **TEAM** number (if applicable) at the **upper right corner** of the first page; and the **name** in all remaining pages.
- All printed work must be stapled, with good presentation. Final results must be emphasized (example **red underline** or **highlighted box**)
- Online work must have in the first text line the name of the student and the team number (when applicable).
- No late work will be accepted but special circumstances will be considered if reported on time
- Due dates for Lab assignments, homework and exams will be notified with at least one week in advance.
- An **individual quiz** might be applied online the due date for each homework, or in class.
- Detailed instructions for the **Labs** and other policies will be **provided later** in separate handouts and in **BlackBoard**

## GRADING

ITEM	Points / Ea
Exams 1, 2, 3 & 4	200
Team class discussions/problems	5
Homework Quiz	10-20
Reports or special assignments	30-60
PowerPoint presentations	40-60
Points given by instructor on student participation	0-20

- Each element will accumulate points
- Some elements are individual and others depend on team performance
- **Show always all the procedure** to arrive to the solutions. End results without the right procedure are considered conceptual errors.
- In exams each problem has its own weight and will be indicated at the beginning of the problem, points are given by problem section (e.g. sections *a* and *b* of same problem have their own points).
- The grade of an exam answer will be 100% if correct and justified or 0%. To earn partial credit, the student will need to provide an additional paper identifying the reason for the errors, justifying the correct answer and return with the original test back for second grading.
- Labs and special problems have the grades Satisfactory (100%), Attempted (50%) or Unsatisfactory (0%) for the points available. Online quizzes are either "all or nothing" points.
- Letter scale will be **A**: 90%-100%; **B**: 80%-89.9%; **C**: 70%-79.9%; **D**: 60%-69.9%; **F**: below 60% of the reference grade.

## Academic Honesty

- It is expected that the students will conduct with integrity in all course areas. Do not attempt to engage in a dishonest activity such as copying, plagiarism, falsifying information, etc. The professor will take measures to prevent such instances and will bring a case to the university authorities.

- Information about University wide policies could be found in the Dean of Students Web page at <http://studentaffairs.utep.edu/Default.aspx?alias=studentaffairs.utep.edu/dos>

#### **TEAM Policies**

- Some assignments will be reported in **teams of 2 or 3 students**. However there is always an individual evaluation for each activity. **Teams could be self selected.**
- PowerPoint presentation will be in **groups of 3 students**.
- All members ***must contribute*** for each assignment and need to show their own part in the team's report.