

The University of Maryland Asian Division
IFSM 450 Telecommunications for Managers

TERM 5
June 4 - July 25, 2006
Monday / Wednesday 1800-2100

Syllabus

INSTRUCTOR: BJ Gleason
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Email: bjgleas@gmail.com
Web Site: <http://www.thinairlabs.com>
Office Hours: Before/After class, and by appointment.

PREREQUISITE: **Don't even think about taking this course if you have not finished IFSM 300 and IFSM 310.** Students are expected to have the knowledge of topics listed under IFSM 300 and IFSM 310 and their prerequisites. If you have any questions, please contact the instructor.

TEXTBOOKS: Dodd, Annabel (2005) The Essential Guide to Telecommunications 4th Ed. ISBN: 0131487256

DESCRIPTION: An analysis of technical and managerial perspectives on basic concepts and applications in telecommunication systems. An overview of data communication protocols and standards; local area networks, wide area networks, and internetworks; and trends in telecommunications is provided. The implications of the regulatory environment and communications standards on transmission of voice, data, and image are examined.

OBJECTIVES: Upon successful completion of this course the student will:

- Have an understanding of communications technology
- Be able to make informed decisions in telecommunications management.
- Be able to integrate managerial decisions into a cohesive data communications network design.
- Understand and remain informed about current telecommunications technologies
- Be able to perform design activities for networks of increasingly greater scope and complexity
- Be familiar with networking hardware, software, standards and protocols.

INTERNET ACCESS: Students will be expected to have e-mail and Internet access. Some homework assignments will require extensive use of these resources.

MAILING LIST: **Students are required to sign up for the class mailing list before the first class meeting. This is your first graded assignment.** See the website for instructions.

EVALUATION:

| | |
|----------------------------|-----|
| Attendance / Participation | 10% |
| Quizzes | 15% |
| Assignments | 10% |
| Examination 1, 2 | 40% |
| Final Examination | 25% |

POLICIES, PROCEDURES AND GRADES: IAW with the University of Maryland, University Catalog, Asian Division, and the Student Handbook (current editions). These cover essential information such as attendance, grading, make-up work and plagiarism.

ATTENDANCE: Because much of the material in this class consists of in-class group problem solving activities, class

attendance is essential. Students are expected to attend all scheduled classes. However, if a student must miss a class due to military obligations or other unavoidable circumstances, every effort must be made by the student to obtain class notes and other material discussed. Communication with the instructor is vital and the student should notify the instructor of any anticipated absences. **There are NO makeups for missed assignments or examinations unless the instructor is informed ahead of time. Attendance is taken only at the beginning of class.**

HOMEWORK: **All assignments must be turned in at the beginning of class on the due date.** In the event of bonafide duty-related absence on the due date, arrangements must be made with the instructor in advance. **Homework is not accepted late.**

PLAGIARISM POLICY: Plagiarism is defined: to steal or use the ideas or writings of another as one's own. This may be avoided in most instances by giving credit/recognition to the original author. The University of Maryland, Asian Division's standard plagiarism policy is: intentionally plagiarized papers, reports, or exams will receive an F or 0 (zero), whether copied whole or in part. Subsequent cases of plagiarism can result in failure in the course. Unintentional plagiarism - cases arising from student inexperience rather than deliberate deception can result in a lower grade on papers than they might otherwise deserve.

PHONES: Are to be tuned off before class begins. Emergency personnel should set their devices to vibrate.

SCHEDULE: *Schedule is subject to change, however all subjects will be covered. See website for changes.*

| Week | DISCUSSION TOPICS | Chapters |
|------|--|----------|
| 1 | Introduction, Basic Concepts | 1 |
| 2 | VoIP Systems, Circuit Switched PBXs and Cabling | 2 |
| 3 | Exam 1 / Industry Overview | 3 |
| 4 | VoIP, the Public Switched Telephone Network, and Signaling | 4 |
| 5 | VPNs and Specialized Network Services / Exam 2 | 5 |
| 6 | Entertainment, Cable TV, and Last-Mile Fiber Systems, The Internet | 6, 7 |
| 7 | Mobile Services | 8 |
| 8 | Wi-Fi, Wireless, and Personal Area Networks / Final Exam | 9 |

Prerequisite Quiz: *Are you ready for this class?*

1. What is the ASCII value for "A"?
2. What is the binary value of the hexadecimal value 1A?
3. What should you do first if your Windows NT/2000 system will not boot?
4. Which OSI Layer encrypts data?
5. What is a NIC?