

Course	ITM 5100 / JA / Information and Communications Systems and Networks
Term	Spring 1, 2010 – Monday – 6:00 – 10:00 pm 1/4, 1/11, 1/25, 2/1, 2/8, 2/15, 2/22, 3/1 No class on Monday, January 18 - MLK Holiday - Makeup class TBD by Instructor
Instructor	Name: Thomas Jakubowski Home: (904) 260-7540 Work: (904) 636-2751 Email: tjakubow@webster.edu
Catalog Description	This course introduces students to the technical aspects of information and communications networks and technology. The course focuses on the interdependencies among information and communications technologies and architectures. Emphasis will be placed on the fundamentals of networks (LAN and WAN).
Prerequisites	ITM 5000 – Information Technology Management - Overview
Course Level Learning Outcomes	After completing this course, students will: <ul style="list-style-type: none"> • know and explain the important technical terminology, concepts, principles, techniques, and theories related to the technical aspects of information and communications networks and technologies, with an emphasis on the fundamentals of networks (LAN and WAN). • Explain the interdependencies among information and communications technologies and architectures. • have the technical knowledge and background needed to explain data and voice communications systems and networks, and the interconnectedness of these technologies

<p>Materials</p>	<p>Textbook White, C. (2008). Data Communications and Computer Networks: A Business User’s Approach. (5th Edition). Cengage Learning. ISBN# 142390303X</p> <p style="text-align: center;">To Order Textbooks go to the local North FL website www.webster.edu/jack and click on Order Textbooks to select a vendor</p> <p>Note: Textbooks must be ordered 2 weeks prior to class to ensure delivery</p> <p>Supplemental Reading:</p> <ul style="list-style-type: none"> • <u>Research Paper Guidelines and Sample Paper</u> – See website @ www.webster.edu/jack and click on the Student Resources category. 																												
<p>Grading</p>	<table border="1" data-bbox="480 695 1411 1144"> <thead> <tr> <th style="text-align: left;">Assignments</th> <th style="text-align: right;">Maximum Points</th> </tr> </thead> <tbody> <tr> <td>• Discussion questions and/or Labs (4)</td> <td style="text-align: right;">20 Points (20%)</td> </tr> <tr> <td>• Research Project (written report and oral presentation)</td> <td style="text-align: right;">25 Points (25%)</td> </tr> <tr> <td>• Exams (3@ 15% each)</td> <td style="text-align: right;">45 Points (45%)</td> </tr> <tr> <td>• Class Participation and Attendance</td> <td style="text-align: right;">10 Points (10%)</td> </tr> <tr> <td>TOTAL</td> <td style="text-align: right;">100 Points</td> </tr> </tbody> </table> <p>Letter grades will be assigned pursuant to the following scores based on the percent of the total possible points (weighted according to the scale above) that you earned in the course.</p> <table border="1" data-bbox="753 1331 1203 1734"> <thead> <tr> <th>Percentage of Total Points</th> <th>Grade</th> </tr> </thead> <tbody> <tr> <td>95%-100%</td> <td>A</td> </tr> <tr> <td>90%-94%</td> <td>A-</td> </tr> <tr> <td>88%-89%</td> <td>B+</td> </tr> <tr> <td>84%-87%</td> <td>B</td> </tr> <tr> <td>80%-83%</td> <td>B-</td> </tr> <tr> <td>70%-79%</td> <td>C</td> </tr> <tr> <td>Below 70%</td> <td>F</td> </tr> </tbody> </table>	Assignments	Maximum Points	• Discussion questions and/or Labs (4)	20 Points (20%)	• Research Project (written report and oral presentation)	25 Points (25%)	• Exams (3@ 15% each)	45 Points (45%)	• Class Participation and Attendance	10 Points (10%)	TOTAL	100 Points	Percentage of Total Points	Grade	95%-100%	A	90%-94%	A-	88%-89%	B+	84%-87%	B	80%-83%	B-	70%-79%	C	Below 70%	F
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<p>Activities</p>	<p>Discussion Questions/Labs:</p> <ul style="list-style-type: none"> • Discussion questions from the text and/or labs, approximately four totaling 20% <p>Exams:</p> <ul style="list-style-type: none"> • They will each consist of multiple choice and short answer questions. • These exams will be given at the start of periods 3, 5, and 9. • Exams will be non-cumulative. <p>Research Project (Paper 15% and Presentation 10%)</p> <ul style="list-style-type: none"> ○ One Research Paper will be due during Session 7. A corresponding Powerpoint Presentation will be given during Session 9. ○ All papers must be typed in a standard format (APA, MLA) using 12 point Times New Roman or Arial font. Source citation and bibliography must be included with each paper. Any discrepancy between this guideline and the Webster Research guides located on the Webster /Jacksonville website will be resolved with the Webster Research guidelines prevailing. ○ Grammatical and spelling errors will result in scoring penalties. Major deficiencies in grammar and spelling will result in the paper being returned un-scored for resubmission for a maximum potential grade of 70/100 points, provided all grammar and/or spelling issues are resolved. ○ Late submissions will result in a 25% reduction in score without exception – on top of any other score reductions. If a student is unable to attend class, arrangements must be made with the instructor to submit the paper prior to the seventh class period, or, if the late submission is the presentation, arrangements must be made with the instructor to submit the Powerpoint and make the presentation to the class prior to Session 9. ○ Oral presentation visual aids should be prepared using PowerPoint. <p><i><u>---These case studies will be presented in the context and focus as if your manager read this case work and was unclear as to its content and meaning. Your manager has asked you, as the Telecommunications Manager and your team members, to analyze the information and present a short overview to the rest of the company's management team. This presentation can be given as a role-play, skit format, formal presentation format, etc... But all group members must have an active role in the work and presentation.</u></i></p> <p>Class Participation and Attendance:</p> <ul style="list-style-type: none"> • Students are expected to attend all class sessions of every course for the full 36 contact hours. In the case of unavoidable absence, the student must contact the instructor. The student is subject to appropriate academic penalty for incomplete or unacceptable makeup work, or for excessive or unexcused absences. Generally, a student who misses more than one four-
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	<p>hour course period (per course) without a documented military or medical excuse and advanced permission of the instructor should withdraw from the class. The University reserves the right to involuntarily drop enrolled students from classes, which they do not attend. PLEASE BE ADVISED: <u>Students who do not attend the first class session, who have not made prior arrangements with the instructor for being absent, will be dropped from their courses.</u></p> <ul style="list-style-type: none"> • Attendance the last day of class is mandatory to ensure that all work is completed and to be awarded a passing grade. An Incomplete will not be acceptable without documental proof (Death Notice, Doctor’s Letter, etc.) as to absence relating to non-completion of class work. These must be faxed 904-262-1459 or dropped off to Webster University by the Monday after the term ends. • Participants are expected to arrive on time and be actively involved in the learning experience. Each student should desire to learn, participate, and proactively contribute to the learning of others during each discussion and exercise. • Students are to participate in classroom discussions. The discussions are an opportunity for students to reveal their understanding of the assignments made for the current and previous classes. • Assignments are given to prepare the student to participate in class discussions; therefore, it is imperative that reading assignments and associated questions for discussion be completed prior to class. • A maximum of 10 points will be awarded based on the level and quality of participation and preparation. • Failure to turn in an assignment within one week will result in a grade of "0" for that assignment. In addition, failure to submit an assignment will lower the final grade by an additional two points. • All assignments are due as detailed in the Course Schedule. • Late assignments will be accepted, if they are turned in <i>no later</i> than one week later, but will be penalized one letter grade. Furthermore, late assignments will lower the student's final grade by an additional one point. • Late assignments will not be accepted for the final assignments the last week of the course to allow timely completion and grades to be submitted.
<p>Policy Statements: University Policies</p>	<p>University policies are provided in the current course catalog and course schedules. They are also available on the university website. This class is governed by the university’s published policies. The following policies are of particular interest:</p> <p>Academic Honesty</p> <p>The university is committed to high standards of academic honesty. Students will be held responsible for violations of these standards. Please refer to the university’s academic honesty policies for a definition of academic dishonesty and potential disciplinary actions</p>

	<p>associated with it.</p> <p>Drops and Withdrawals</p> <p>Please be aware that, should you choose to drop or withdraw from this course, the date on which you notify the university of your decision will determine the amount of tuition refund you receive. Please refer to the university policies on drops and withdrawals (published elsewhere) to find out what the deadlines are for dropping a course with a full refund and for withdrawing from a course with a partial refund.</p> <p>Special Services</p> <p>If you have registered as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor at the beginning of the course of the accommodations you will require in this class so that these can be provided.</p> <p>Disturbances</p> <p>Since every student is entitled to full participation in class without interruption, disruption of class by inconsiderate behavior is not acceptable. Students are expected to treat the instructor and other students with dignity and respect, especially in cases where a diversity of opinion arises. Students who engage in disruptive behavior are subject to disciplinary action, including removal from the course.</p> <p>Student Assignments Retained</p> <p>From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case, should the assignment or project be shared outside the academic Department, the student's name and all identifying information about that student will be redacted from the assignment or project.</p> <p>Contact Hours for this Course</p> <p>It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, it must be rescheduled.</p>
<p>Course Policies</p>	<p>Attendance at all class sessions is expected.</p> <p>Late assignments will be accepted if prior arrangements have been made with the instructor, but will be given reduced points based upon the number of class sessions it is late.</p> <p>Make-Up Requirements</p> <ul style="list-style-type: none"> • For each class hour missed, a one (1) page, double-spaced, typed paper, with one (1) reference will be submitted by the end of the term. The instructor will assign the topic. A four (4) hour class will require four (4) pages supported with (4) references from popular or academic press. • This paper will be graded and incorporated in the class participation grade.

	<p>If the make-up work is not submitted, the student's final grade will be reduced one (1) letter grade.</p> <ul style="list-style-type: none">• Students are responsible for any class material presented during their absence, and any assignments due should be submitted prior to the absence, if possible.
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Weekly Schedule		Pre-Assignments for Session 1: <ul style="list-style-type: none"> • Read Chapters 1 and 2 from the text
	Session 1	THEME: Introduction to the Course; Fundamental Concepts: Networks and Signals Topics: <ul style="list-style-type: none"> • Outline and review all the requirements of the syllabus requirements • Review Chapters 1 and 2 from the Primary text • Review Discussions questions • Lab 1 Complete and submit to Course Web Site • Assignment of Research Paper Topics Assignments for Session 2: <ul style="list-style-type: none"> • Start reviewing Chapters 3 & 4 • Complete Assigned Discussion Questions and Upload to course Web Site
	Session 2	THEME: Media and Connections Topics: Wired and Wireless Media <ul style="list-style-type: none"> • Review Chapters 3 & 4 • Have assigned questions completed and ready to discuss in class. • Selection of Research Paper Topics Assignments for Session 3: <ul style="list-style-type: none"> • Prepare for Exam 1 • Read Chapters 5 and 6 in the Primary Text and
	Session 3	THEME: Connection Efficiency Topics: Multiplexing, Compression, Error Handling <ul style="list-style-type: none"> • Exam 1 • Discussion of Chapters 7 and 8 Assignments for Session 4: Complete Assigned Discussion Questions and upload

		to Course Web Site
	Session 4	<p>THEME: LAN Architectures & Communications Topics: LAN software and support systems</p> <ul style="list-style-type: none"> • Review of Chapter 7 and 8 plus in class discussion of the end of Chapter questions <p>Assignments for Session 5:</p> <ul style="list-style-type: none"> • Study For Exam 2 • Read Chapters 9 and 10 from the Text
	Session 5	<p>THEME: WAN Concepts and the Internet Topics: Wide Area Networks, Internet Basics</p> <ul style="list-style-type: none"> • Lab time from 6:00 p.m. until 7:00 p.m. for group presentation work and completion of any assigned class-work • Mid term Exam -1.5 hours • In class review of Chapters 9 and part of 10 <p>Assignments for Session 6:</p> <ul style="list-style-type: none"> • Read Chapter 11 in the text
	Session 6	<p>THEME: The Internet and Voice Communications Topics: Internet, Voice and Data Delivery Networks</p> <ul style="list-style-type: none"> • Discussion of Chapters 10 and 11 • Lab Exercise – upload to Course Web Site <p>Assignments for Session 7:</p> <ul style="list-style-type: none"> • Complete and upload Research Paper to Course Web Site • Read Chapter 12

	<p>Session 7</p>	<p>THEME: Network Security Topics:</p> <ul style="list-style-type: none"> • Review and Discussion of Chapter 12 of text • Lab Exercise (upload to Course Web Site) <p>Assignments for Session 8:</p> <ul style="list-style-type: none"> • Read Chapter 13 • Prepare question set and upload to course web site 	
	<p>Session 8</p>	<p>THEME: Managerial Issues; Evolving Technologies Topics:</p> <ul style="list-style-type: none"> • Review Chapter 13 and course questions <p>Assignments for Session 9:</p> <ul style="list-style-type: none"> • Study For Final Exam and have presentations ready for presentation on the 9th meeting 	
	<p>Session 9</p>	<p>THEME: Final Examination Topics:</p> <ul style="list-style-type: none"> • Class and instructor evaluations • Presentations • Exam 3 	
<p>Additional Information</p>	<p>Determination of Grades is Based on the Following Criteria: <u>Minimum Requirements:</u> Products (papers, case studies, projects) must be on time, in the correct format, corrected for spelling and grammar, appropriate materials included and referenced to-the-point and on topic and conclusions must be supported.</p> <p>Examinations must be complete, accurate, neat, evidence clear thought, and exhibit concise and to-the-point responses.</p> <p>Behavior in class discussions and group activities should be responsible, should exhibit open communication, be constructive, and helpful.</p> <p><u>Mastery Level (Grade of “B”): Professional Achievement</u> Products must meet the requirements stated above for minimum requirements and additionally meet professional criteria. For example, documentation should be included to support research papers, the APA format should be used consistently throughout the paper, and substantially more than the minimum number of references should be included. Presentations should be logical, organized, and comprehensive.</p> <p>Examinations should be organized, in depth, comprehensive, logical and complete, and evidence thorough understanding of the subject /topic through</p>		

application of principles.
 Classroom behavior should exhibit very focused activity and thought on the subject at hand, be motivated, and assist in discovery of new insights and relationships concerning the subject/topic of discussion.

Mastery Level Plus (Grade of “A”): *Creative Achievement*
 Products must meet all requirements stated above and additionally meet creative criteria. These criteria include unique topic or subject selection, synthesis of ideas, evaluation of subject matter and positions found in the literature, be creative in approach, establish new relationships with ideas and provide new insights.

Examination responses indicate insightfulness of understanding, a synthesis of information and unique ideas, and rationale for application of principles following careful analysis.

Classroom behavior should exhibit very focused activity and thought on the subject at hand, be motivated, and assist in discovery of new insights and relationships concerning the subject/topic of discussion.

The grade of “A” represents the best work of students, accomplished in a unique and professional manner.

Note:
 To achieve the objectives of this course, this syllabus may be revised at the discretion of the instructor without prior notification or consent of the student.

Reviewed by: *J. Ewing*
 Job Title: Faculty Coordinator
 Date: 12/15/09

Revised 12/14/09