Business Data Communications ISM4220

Syllabus –Spring 2023

Instructor:	**Willard Baird**	**Office Hours:**	
Office:		**Monday:**	
		Tuesday:	
Instructor's Homepage:	**Optional**	**Wednesday:**	
Fax:		**Thursday:**	
Email:	**wwbaird@usf.edu**	**Friday:**	
Classroom:	**Online**		
Time:		**By Appointment**	
Credit Hours	**3**		

<u>**COURSE SPECIFIC SECTION**</u>

Course Prerequisite and Grade Requirements:

Prerequisites: ISM3011 - GPA Requirements: Undergraduate students who enter USF under the 2001-2002, or later, catalog are required to earn a grade of C, or better, in every undergraduate core class and an overall GPA of 2.0 for all undergraduate core classes.

Course Description: Fundamentals of data communication, including network architectures, communication protocols, transmission standards and media access control methods.

Course Objective(s):

This course provides students with an understanding of the concepts associated with data communications and distributed information systems. Students learn about network

architectures, data encoding schemes, transmission media, communication protocols, transmission standards, and media access control methods. WANs, LANs, and internetworking technologies are also explored. The course concludes with a brief introduction to network security & administration.

Canvas

Students are responsible for monitoring this site on a regular basis. Canvas can be easily accessed from https://my.usf.edu. If you need a NetID or password reset, visit https://netid.usf.edu

Required Text
Michael G. Solomon, David Kim, and Jeff Carrell. *Fundamentals of Communications and Networking*, 2nd ed. Burlington, MA: Jones & Bartlett, 2015

Required Software and Hardware

Access to stable internet connection
Microsoft Excel (pivot table assignment)

Microsoft Word or ability to save files as doc(x)

PDF writer such as Adobe PDF or CutePDF (free)

Students will need to access computers in the library or Student Success Center located in Dav 107 if personal computer issues prevent successful completion of assignments.

Grading:

Grade	>=	<
A+	97.0%	100%
A	93.0%	96.9%
A-	90.0%	93.0%
B+	87.0%	90.0%
B	83.0%	86.9%

B-	80.0%	83.0%
C+	77.0%	80.0%
C	73.0%	76.9%
C-	70.0%	73.0%
D+	67.0%	70.0%
D	63.0%	66.9%
D-	60.0%	63.0%
F	0	60%

Plus and minus letter grades will be assigned.

Each student will receive his/her grade based on accumulated points.

Course Policies:

- You are encouraged to work ahead.
- You must complete and submit all work by the Due Date given.

- Additional notes and announcements will be posted on Canvas, please check frequently.
- Any questions will be happily answered via email. ***Please be specific about which class and assignment you discussing.***

Drop Date:

The last day to drop without academic penalty is January 17th

Key Leadership Skill(s) and Perspectives Addressed in This Course:

Written and Oral Communication	Information Technology Skills	Innovation and Critical Thinking	Ethics and Sustainability	Global and Multicultural Competence
4(a)	5(b)	4(c)	5(d)	1(e)

Written and Oral Communication: Written assignments and lab reports are required to develop them communication skills.

Information Technology Skills: Students are introduced to packet sniffer tools. They learn how to capture and analyze data packets. They will also design virtual networks using CISCO Academy Packet Tracer tool

Innovation and Critical Thinking: Students develop innovation and critical thinking in various assignments including class activities, and lab tasks.

Ethical and Sustainability: The course includes discussions of ethical issues in Data Communications. Requirements for ethical and socially-responsible behavior are included in the assignments.

Global and Intercultural Competence: The textbook makes limited reference to the use of data communication technology in other countries.

Academic Dishonesty:

See USF Policy on Academic Dishonesty and Disruption of Academic Process at http://www.usfsp.edu/catalog-grad/academic-integrity-of-students.htm

Because of the University's commitment to academic integrity, plagiarism or cheating on course work or on examinations will result in penalties that may include a grade of "F" for the specific exam or course work and a grade of "F" or "FF" for the course. Any incident of academic

dishonesty will be reported to the dean of the college. Definitions and punishment guidelines for Plagiarism, Cheating, and Student Disruption of the Academic Process may be found at the web address listed above.

Students with Disabilities:

Please notify your instructor if you have a learning disability or require special assistance with this course. Confidential personal and learning assistance counseling are made available to students through the Division of Student Affairs. Contact R. Barry McDowell (mcdowell@stpt.usf.edu) for more information.

Religious Holidays:

Students who must miss class or an examination due to a religious holiday should notify the instructor during the first two weeks of class

Determination of Final Grade:

Activity	Quantity	Possible Points
Quizzes	10	100
Homework	03	75
Network Labs	07	70
Final Test	1	55
Total Points		**300**

GRADED ACTIVITIES:

Quizzes (10): Quizzes are scheduled weekly to test the <u>conceptual knowledge</u> from the textbook chapters. Students need to read the assigned chapters every week and get ready for the quiz.

1. Each quiz consists of multiple-choice questions. They are timed quizzes. Students have 20 minutes to complete a quiz. When the time is up and one has not completed all questions, your answered questions will be automatically saved and submitted.
2. They are open-book quizzes. However, if you are not prepared beforehand, you may not have enough time to scan through the book and search for answers to all questions within the 10-minute time frame.

Homework (03): Homework assignments including problems, hands-on exercises and discussions are provided for students to practice hands-on skills or to develop knowledge from class interactions.

1. All homework problems and hands-on exercises are individual practice exercises. The instructor will be available via various ways (Microsoft Teams, emails, phone calls, etc.) to help. However, DO NOT collaborate with your classmates. DO NOT seek help from outside of the class. Or you will receive a zero on the assignment.

Course Policies: Class Communication: Chapter instructions and materials, assignments and quizzes, project deliverables, and notices on changes to the schedule will be posted on the Canvas course website. Students are responsible for monitoring this site regularly and reading all posted announcements. Class-related email will be sent only to your USF email account; therefore, you will need to check your USF email account regularly and/or set forwarding to route incoming mail to another account.

Late Assignments & Makeups: Late work will not normally be accepted. The instructor reserves the option to make exceptions based on the specific circumstances presented by the student, but point deductions for tardiness will be made for any work that is not turned in on time. **QUIZZES CANNOT BE MADE UP** unless for documented medical reasons**.**

Schedule/Outline:

CLASS MEETING SCHEDULE

Note: All assignments can be found on Canvas.

Weeks	Chapter Readings	Assignments Due *		
Module01 Lesson 1 01/09	Ch 1 – Today's Personal and Business Communication Requirements	First-Day Survey **Due 01/13 8:00 a.m.**		
Lesson 2 01/17	Ch 2 – Solving Today's Business Communications Challenges	Quiz 1 Due 01/23		
Lesson 3 01/23	Ch 3 – Circuit-Switched, Packet-Switched	Quiz 2 Due 01/30		
Lesson 4 01/30	IP Addressing Home work Assignment 1	Due 02/06		
Module02 Lesson 5 02/06	Ch 4 – The Evolution of Ethernet	Quiz 3-Due 02/13	Lab: Assessing the Physical and Logical Network Infrastructure	
Lesson 6 02/13	Ch 5 –TCP/IP and Networking	Quiz 4-Due 02/20	Lab: Analyzing Data Link and Network Layer Traffic with Wireshark	

Lesson 7 02/20	Ch 6 – Layer 2 Networking	Quiz 5-Due 02/27	Lab: Analyzing Transport and Application Layer Traffic with Wireshark
Lesson 8 02/27	Ch 7 – Layer 2 VLANS	Quiz 6-Due 03/06	Lab: Configuring a Layer 2 Network with the Spanning Tree Protocol
Lesson 9 03/06	Ch 8- Layer 3 Networking	Quiz 7 due 03/27	Lab: Configuring a Layer 3 Network with Dynamic Routing Protocols
3/13	SPRING BREAK		
Lesson 10 03/20	Ch 9 – Wireless Lan		
Lesson 11 03/27	Internet of Things Cisco Network Academy Assignment-**Home work assignment 2**	Due 4/10	
Lesson 12 04/03	Internet of Things Assignment -Continued		

Module03

Lesson 13 04/10	Ch 13 –Configuration Management and Asset Control	Quiz 09- Due 4/17	Lab: Configuring an SNMP Manager and Alerts
Lesson 14 04/17	Ch 14 – Network Performance Management	Quiz 10-Due 4/24	Lab: Monitoring and Assessing Network Performance
Lesson 15 04/24	**Home Work Assignment 3**	**Due 04/28**	
Final Exam 04/29-05/04			

* The first-day survey is due the first Thursday at midnight (11:59pm).

Business Program Learning Goals (Skill(s) and Perspectives)

Addressed in This Course:

Course Policies:

List all instructor requirements and expectations, including attendance policies, making up missed work or missed exams, preparation for class, and class conduct – including cell phone use.

End of Semester Student Evaluations: Explain the evaluations and context.

Example: All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is highly encouraged and valued.

1. **Technology and Media**

Email: how it will be used, who will communicate with whom, who answers technology questions, expected response time, will you check it on weekends, etc.

Canvas: Describe how you will use Canvas in the course, how often students should expect to login, how team activities will be organized, due dates, policies on late participation, etc.

Example: This course will be offered via USF's learning management system (LMS), Canvas. If you need help learning how to perform various tasks related to this course or other courses being offered in Canvas, please view the following videos or consult the Canvas help guides. You may also contact USF's IT department at (813) 974-1222 or help@usf.edu.

Online Courses may be subject to the following:

Electronic Plagiarism Detection: Students are hereby notified that the instructor intends to use electronic plagiarism detection services in this course. By registering for and participating in this course, students consent to their work being sent to, analyzed by and stored in any plagiarism detection service.

Online Proctoring Syllabus Statement:

All students must review the syllabus and the requirements including the online terms and video testing requirements to determine if they wish to remain in the course. Enrollment in the course is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period.

Online exams and quizzes within this course may require online proctoring. Therefore, students will be required to have a webcam (USB or internal) with a microphone when taking an exam or quiz. Students understand that this remote recording device is purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing in the residence. To avoid any concerns in this regard, students should select private spaces for the testing.

The University library and other academic sites at the University offer secure private settings for recordings and students with concerns may discuss location of an appropriate space for the recordings with their instructor or advisor. Students must ensure that any recordings do not invade any third party privacy rights and accept all responsibility and liability for violations of any third party privacy concerns. Setup information will be provided prior to taking the proctored exam. For additional information about online proctoring you can visit the online proctoring student FAQ (Links to an external site.).

Panopto: If your course uses lecture-capturing, mention that is will be in use and that student voices may be heard in the captured content.

Laptop Usage: Describe your policies for using laptops throughout your course. Whether you dislike the use of laptops during your lecture, or whether you encourage using a laptop during discussion, feel free to state it here.

Classroom Devices: Describe your policies for using calculators, tape recorders, other audio & technology devices for your course.

Phone Usage: Describe your policies for student phone use in class, including texting or surfing the Internet. If you are using social media for a "backchannel" conversation, mention it here. If you would prefer that students not take photos/video/audio recordings of you, or of the whiteboard notes at the end of the class, state so here.

Cell phones, pagers or any other communication device brought to class, should be **turned off** and not used in the classroom. These devices are not to be used during an exam.

Turnitin.com: If you are using this plagiarism-detection service, it is recommended that you clearly state so on the syllabus. In order to comply with privacy laws, students are not required to include personal identifying information, such as name, in the body of the document. Turnitin provides an originality report letting the instructor know how much of the assignment is original.

Example: In this course, turnitin.com will be utilized. Turnitin is an automated system which instructors may use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you will be expected to submit all assignments in both hard copy and electronic format. After the assignment is processed, as instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process visit http://www.turnitin.com. Essays are due at turnitin.com the same day as in class.

University Policy

Honor System: Under the USF Honor System, each student is expected to observe complete honesty in all academic matters. Violation of the Honor System will be referred to the Honor Council. Note: The following are violations of the Honor Code: Copying another student's homework, signing another student's name on the attendance roster, copying another group's disk or written work, using another student's computer disk to print out your assignment, copying another student's file onto your disk, and misrepresenting a reason for a missed exam. Punishment for academic dishonesty may result in an automatic "F" or "FF" in the course or action that may result in suspension or expulsion. See the USFSP Policy on Academic Integrity of Students at page 51 of the following links: http://www.usfsp.edu/catalog/files/2017/12/USFSP-2017-18-Undergraduate-Academic-Catalog.pdf (for undergraduate)

http://www.usfsp.edu/catalog/files/2018/01/USFSP-Graduate-Catalog-2017-18.pdf (for graduate)

Students with Disabilities: Please notify your instructor by the second class meeting if you have a learning disability or require special assistance with this course. Confidential personal and learning assistance counseling are made available to students through the Division of Student

Affairs. Contact R. Barry McDowell, St. Petersburg Campus: Student Life Center (SLC 1203) (727) 873-4990, (mcdowell@usfsp.edu) for more information. Students who need extended time on exams need to inform the Disabilities Office at least seven (7) school days (Monday-Friday) in advance of the scheduled exam, so that the Disabilities Office has adequate time to inform me.

Religious Observances: Students who anticipate the necessity of being absent from class due to the observance of a major religious holiday must provide notice of the date(s) to the instructor, in writing, by the second class meeting.

Copyrights: Students who wish to audiotape lectures can do so with direct permission from the professor, but tapes and lectures may not be sold. No videos or photos can be taken in the classroom!

Incomplete Grades: An "I" grade may be given to an undergraduate student only when a small portion of the student's work (normally 30% or less) is incomplete due to circumstances beyond the control of the student and only when a student is otherwise earning a passing grade. "I" grades are to be used only in emergency situations and cannot to be used as a means of avoiding a poor grade. Normally these are only for medical emergencies and require a signed letter from a medical professional that the student was prevented from attending class. The student must petition the professor before the week of final exams for a grade of "I" to be given.

Grade Forgiveness: Undergraduate grade forgiveness is limited to three USFSP courses with no more than one repeat per course. Accounting majors can use the forgiveness only once in upper level accounting courses. There is NO grade forgiveness at the **Graduate Level.**

S/U GRADES: State whether this course can be taken on an S/U basis.

WITHDRAWAL: No "W" grades can be obtained after the official drop or withdrawal date (indicate date for each semester). All students enrolled as of the withdrawal date (indicate date for each semester), will receive a letter grade of A, B+, B, C, C+, C, D+, D or F.

ELECTRONIC PLAGIARISM DETECTION: Students are hereby notified that the instructor intends to use electronic plagiarism detection services in this course. By registering for and

participating in this course, students consent to their work being sent to, analyzed by and stored in any plagiarism detection service.

EMERGENCY PREPAREDNESS: In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Elluminate, Skype, and email messaging and/or an alternate schedule. It is the responsibility of the student to monitor Canvas site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

BOMB THREAT OR OTHER DISRUPTION: All scheduled classes will be held in an alternate room in the case of a bomb scare, fire alarm or other disruption. Students will gather outside of the classroom building **at a designated area in the parking lot** so that an alternative room may be announced.

Supporting Crime Victims and Violence Against Women Act (VAWA):

If you are the victim of a crime, USFSP is ready to assist you in the manner that you determine is best for you. Please know that, as a USF employee, I am obligated by Federal law to immediately report any incidents of sexual assault, dating & domestic violence, and stalking relayed to me – including the victim's name – to the USFSP Police Department and/or the USFSP Dean of Students. If you desire confidentiality, there are campus and community resources listed below that will respect that decision. (cont'd)

Confidential Resources	**Non-Confidential Resources**
USFSP Victim Advocacy Services	
	USFSP Police Department
Available: 24hrs/7days	
	Tel: 727-873-4140 or
Tel: **727-698-2079**	
USFSP Wellness Center (SLC 2000)	**Dean of Students & Director of Residence Life & Housing**: Dr. Jacob Diaz
M/T/W/F: 8am – 5pm	
	PNM
Thurs: 9:30am – 5pm	

Tel: 727-873-4422   Tel: 727-873-4823

                                                   deanofstudents@usfsp.edu

Rape Crisis Center of Pinellas County   **Pinellas County Sheriff**

Tel: 727-530-7273   Tel: 727-582-6200 or 911

PEMHS: 727-541-4628

                                                   St. Petersburg Police Department

                                                   Tel: 727-893-7780 or 911

If you are not sure what to do, you are strongly encouraged to contact the USFSP Victim Advocate to confidentially explore your options including: Injunctions & Protective Orders on campus; Changes in Accommodations, Living Arrangements, Class Schedules, & Transportation; Assistance with Academic Issues – missed classes, late assignments, etc.