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| Fall 2015 |
| PSIS 4141 |
| Computer & Telecom Networks |
| 4 Credits |



# Instructor

Scott Tambert, MS: [stambert@gwu.edu](mailto:stambert@gwu.edu)

Office Hours: Tuesdays before and after class, and by appointment

# Class Schedule

09/01/15 - 10/24/15

Tuesdays, 6:00pm-9:00pm

Saturdays, 9:00am – 12:00pm

# Prerequisite

None.

# CourseDescription

This course provides an introduction to computer and telecommunications networks. As we continue to shift to mobile devices and web applications for both our professional and personal lives, the networks that connect us are of vital importance. Modern data and telecomm networks depend on hundreds of protocol standards that work in concert to link us to our transactions, communication and information. The goal of this course is to expose you to the most important of these, but more importantly, give you a broad understanding of how networks like LANs and the internet work. Upon completing this course you will have a working knowledge of local and wide area networks, and a clear mental framework for your past and future learning about how devices and data are connected.

# Learning Outcomes

Upon successful completion of this course students will be able to:

* Understand how local area networks are similar to and different from wide area networks
* Be familiar with specific data communications concepts and terminology
* Describe each layer of the 7-layer OSI networking model
* Recognize various network hardware, software and protocols
* Trace a data packet or frame from beginning to end through network(s)

This course can serve as an introduction to those students who wish to pursue a Network+ Certification from CompTIA. More information can be found at: <http://certification.comptia.org/getCertified/certifications/network.aspx>

# Textbook/Readings/Blackboard

1. Business Data Networks and Security, Ninth Edition, by Raymond R. Panko and Julia L. Panko, Publisher: Pearson, ISBN-13: 978-0-13-274293-1, ISBN-10: 0-13-274293-4

Note on alternate text versions: Previous editions, International versions and other variants of the required text may offer cost savings, however it is solely up to the student to determine what differences exist between the variant and the required text and the suitability of the alternative. The instructor cannot judge or approve other editions or versions.

2. Escape from Lan Island (Free Download on Blackboard)

A free novella for you to download and read prior to our second class. The Weekly Quiz due before the second class is based on it.

Complimentary readings and other resources may be posted on Blackboard on a regular basis.

# Assignments and Expectations

* Students are to read that week’s assigned textbook chapters before class and be ready to ask and answer relevant questions.
* There will be a quiz in Blackboard each week due by 5:30 p.m. Tuesday (just prior to the start of class) assessing the understanding of the chapters. It will consist of three true/false questions worth 1 point each, for a total of 3 points.
* One written question the student would like to ask is due at 6:00 p.m. sharp (at the start of class) every week. Please turn in a printed copy with your name at the top in 72 point type. The large type is helpful for your instructor to see without his reading glasses. Please actually ask your written question or ask a different relevant question during class. This is worth 1 point.
* A News Article Summary will be due at the start of class every week. Students find a **news** article from a **news source** about an interesting development in Business Data Communications, write a 200 word summary of the article and turn in a printed and stapled copy of the article and their summary, worth 2 points.
* Students must use and check their GW email address for all class related communication or forward their GW email address to an email address of their choice. All class communication, including any short notice or urgent communications will be sent to student’s GW email address. Any communication sent to a student’s GW email address is deemed delivered.
* Attendance, punctuality and asking or answering at least one relevant question (worth 1 point) is required for each class session.

# Exams

There will be a Mid-Term and Final Examination. The exams will consist of true/false and multiple choice questions. Each exam is worth 20 points.

# Policy on Late Submission and Exams

* Late assignments will be accepted with penalty; penalties quickly wipe out the points for a given assignment, so an assignment turned in very late will have zero points.
* All submission (except the Weekly News Article Summary and the Weekly Question, which are handed in as hard copy) should be submitted through Blackboard, **not emailed**.
* Students must notify faculty during the first week of class of their intention to be absent from class on their day(s) of religious observance. Faculty will continue to extend to these students the courtesy of absence without penalty on such occasions
* In the event of an unforeseen circumstance where you miss class or a submission deadline, please inform your instructor **immediately**. In the case of a severe illness, you must provide a doctor’s note.

# Attendance Policy

* Attendance is required for all class meetings unless previously excused.
* Punctuality is required. Class starts at 6:00 p.m. Assignments not turned in by 6:00 p.m. have late penalties assessed. Unless previously excused, weekly quizzes, questions and article summaries receive a one point penalty for each portion of an hour they are turned in late.

**University Weather Closings**

In the event of bad weather, late penalties and attendance policies for our class are suspended. Unless the University closes, I will teach class, but only travel to class if you may do so safely.

To find out about the closing of GW because of inclement weather, check University email accounts, <http://campusadvisories.gwu.edu/>, or call the University’s main number 202.994.5050.

# Course Assessment and Grading

The assessment of the course will be through assignments, class participation, midterm and final exam.

GRADING RUBRIC for all written work, including quiz or exam questions and article summaries:

* Perfect spelling, grammar and punctuation: 50% - **Please use the spellchecker built-in to Blackboard**
* Clarity of communication: 50%
  + Your business-style writing focuses on a topic to inform us with ideas, using details, quotations and examples to create a unified whole. Your conclusion supports the topic.

SAMPLE OUTLINE for News Article Summaries:

* What is new
* What you find most interesting
* What are possible implications of this news

The following distribution will be used to calculate grades:

10 Weekly Quiz on Blackboard \* 3 points = 30 points

10 News Article Summaries \* 2 points = 20 points

10 Written Questions \* 1 point = 10 points

Mid-Term Exam – 20 points

Final Exam – 20 points

TOTAL 100 Points

Grades will be awarded in accordance with GWU’s grading scale as follows:

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| Percentage | Grade |
| 93+ | A |
| 90-92 | A- |
| 87-89 | B+ |
| 83-86 | B |
| 80-82 | B- |
| 77-79 | C+ |
| 73-76 | C |
| 70-72 | C- |
| 60-69 | D |
| 0-59% | F |

# Classroom Conduct

Students are expected to conduct themselves in a manner that is conducive to learning, as directed by the instructor. Any student who negatively impacts the opportunity for other students to learn will be warned – if disruptive behavior continues, the student will be asked to leave the classroom.

# Email Etiquette

In the age of technology, when most forms of communication are electronic, it is important to adopt a proper etiquette to communicate with one another. It is asked that students use salutation when sending emails to their instructor and sign their name at the end of each email. Students should use their GWU email for any correspondence with the instructor.

# Code of Academic Integrity

Students should familiarize themselves with the “Code of Academic Integrity” for GW: “Academic dishonesty is defined as cheating of any kind, including misrepresenting one’s own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” This extends beyond written work and includes material of any kind found on the Internet. Commitment to academic honesty upholds the mutual respect and moral integrity that GW’s community values and nurtures. To this end, The George Washington University Code of Academic Integrity has been established and must be honored by all members of its community. Please read the "Code of Academic Integrity” at: <http://studentconduct.gwu.edu/code-academic-integrity>.

# Disability

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250, Room Hall, Suite 102 to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: http://gwired.gwu.edu/dss/

The contents of this course may be altered or changed at any time if the instructor deems it necessary. I reserve the right to update this syllabus as class needs arise. Be assured that I will communicate to you any changes to our schedule, syllabus or policies quickly and efficiently through Blackboard.

# Tentative Class Schedule (Subject to Change)

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| **Weeks** | **Date** | **Learning** |
| **Class 1** | Tue 9/1 | Big Ideas and Great Questions  Class Time: 6:00 pm – 9:00 pm – Please be on time to avoid penalties  Our expectations for one another  Introduction to class & Syllabus  Discussion of Articles, Weekly Quizzes, Exams and Questions  Discussion and Lecture |

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| **Class 2** | Sat 9/5 | “Escape from Lan Island”  Class Time: 9:00 am – 12:00 pm - Please be on time to avoid late penalties.  Weekly Quiz on Blackboard due at 8:30 p.m. (just before class)  News Article Summary Due at 9:00 a.m.  One Question Due at 9:00 a.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 3** | Tue 9/8 | Chapter 3  Weekly Quiz on Blackboard due at 5:30 p.m. (just before class)  News Article Summary Due at 6:00 p.m.  One Question Due at 6:00 p.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 4** | Sat 9/12 | Chapter 4  Weekly Quiz on Blackboard due at 8:30 a.m. (just before class)  News Article Summary Due at 9:00 a.m.  One Question Due at 9:00 a.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 5** | Tue 9/15 | Chapter 5  Weekly Quiz on Blackboard due at 5:30 p.m. (just before class)  News Article Summary Due at 6:00 p.m.  One Question Due at 6:00 p.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 6** | Sat 9/19 | Chapter 6  Weekly Quiz on Blackboard due at 8:30 a.m. (just before class)  News Article Summary Due at 9:00 a.m.  One Question Due at 9:00 a.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 7** | Tue 9/22 | REVIEW FOR MID TERM EXAM  Chapters 3-6 |
| **Class 8** | Sat 9/26 | MID TERM EXAM  Chapters 3-6 & Escape From Lan Island |

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| **Class 9** | Tue 9/29 | Chapter 7  Weekly Quiz on Blackboard due at 5:30 p.m. (just before class)  News Article Summary Due at 6:00 p.m.  One Question Due at 6:00 p.m  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 10** | Sat 10/3 | Chapter 8  Weekly Quiz on Blackboard due at 8:30 p.m. (just before class)  News Article Summary Due at 9:00 a.m.  One Question Due at 9:00 a.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 11** | Tue 10/6 | Chapter 9  Weekly Quiz on Blackboard due at 5:30 p.m. (just before class)  News Article Summary Due at 6:00 p.m.  One Question Due at 6:00 p.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 12** | Sat 10/10 | Chapter 10  Weekly Quiz on Blackboard due at 8:30 p.m. (just before class)  News Article Summary Due at 9:00 a.m.  One Question Due at 9:00 a.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 13** | Tue 10/13 | Chapter 11  Weekly Quiz on Blackboard due at 5:30 p.m. (just before class)  News Article Summary Due at 6:00 p.m.  One Question Due at 6:00 p.m.  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 14** | Sat 10/17 | Special Guest Lecturer  Article Presentations  Student Questions  Discussion and Lecture |
| **Class 15** | Tue 10/20 | REVIEW FOR FINAL EXAM  Chapters 7-11 |
| **Class 16** | Sat 10/24 | FINAL EXAM  Chapters 7-11 |