Course Syllabus - ITM 305 Information Technology & Network Essentials - Section 001  
Spring 2016

Instructor: John Wee
Email: JohnWee@BoiseState.edu (You must indicate your Name & Class No on your email, otherwise no response will be given. Expect email to be answered within 36 hrs).  
Phone: 208-426-2483

Office Hours: MBEB 2106, office hours: Thur 3:00pm – 4:30pm or by Appointment Only.

REQUIRED TEXTS & OTHER MATERIALS

• Copy of Microsoft Visio (Windows Only & also accessible in the Classroom).  
• The COBE Writing Guide (you are responsible for downloading this).  
• Additional readings, some available online, as announced.

COURSE CATALOG DESCRIPTION

Both a lecture (ITM305) and lab component (ITM305L) are required to be taken in the same semester. The catalog descriptions are as follows:

ITM 305 INFORMATION TECHNOLOGY AND NETWORK ESSENTIALS (3-0-3) (F/S). Topics include basic concepts of computer hardware, operating systems, data and file management, networking standards, protocols, topologies, architectures, and telecommunications principles. PREREQ: ITM 104, ITM 105, ITM 106, or COBE Computer Placement Exam (Google "COBE placement exam site:boisestate.edu" for more information on the exam).

COREQ: ITM 305-L. ITM 305L INFORMATION TECHNOLOGY AND NETWORK ESSENTIALS LAB (0-3-1) (F/S). Hands-on exercises and activities to supplement lecture component and expand IT concepts into workplace skills. COREQ: ITM 305.

COURSE GOALS

There are three over-arching course goals:

1. Empower every student with a basic information technology "literacy" such that he or she understands the capabilities, applications, and limitations of information technologies, particularly computer networking and telecommunications technologies in business environments.

2. Ensure that every student understands important fundamental concepts underlying technologies, so that when those technologies change (as they inevitably will), the student will be able to understand and evaluate new developments as they occur.
3. Prepare ITM majors for their classes that follow this class, including sampling a number of topics that will be covered in greater depth in following classes. Because ITM 305 is the only class covering telecommunications, data communications, and networking required of all ITM majors, there will be an emphasis on these topics as opposed to more general IT topics (personal computing, database management, systems development, etc.) Success in this Course: The most important things you can do to do well in this course are: **read the syllabus, follow the schedule, read & follow instructions in class, and work with your team members.**

Time management is critical for successful completion of any course, but more so when there is an online component. Schedule your online work time to be the same time during the week to build good study habits.

The course syllabus and schedule on **Blackboard** are your guides to meetings, readings, posted notes, exam times, and activities. You are expected to check blackboard vigorously **AT LEAST TWICE A DAY**. All assignments, Latest announcements, Grades …etc. are going to be posted on blackboard. Ask questions in the class or in the discussion area about anything that is confusing to you **before** it is due.

**BSU Statement of Shared Values**

Boise State University upholds the following values as the foundation for a civil and nurturing environment. Campus community members and all who are part of COBE are expected to adhere to the following values.

- **Academic Excellence** – engage in our own learning and participate fully in the academic community’s pursuit of knowledge.
- **Caring** – show concern for the welfare of others.
- **Citizenship** – uphold civic virtues and duties that prescribe how we ought to behave in a self-governing community by obeying laws and policies, volunteering in the community, and staying informed on issues.
- **Fairness** – expect equality, impartiality, openness and due process by demonstrating a balanced standard of justice without reference to individual bias.
- **Respect** – treat people with dignity regardless of who they are and what they believe. A respectful person is attentive, listens well, treats others with consideration and doesn’t resort to intimidation, coercion or violence to persuade.
- **Responsibility** – take charge of our choices and actions by showing accountability and not shifting blame or taking improper credit. We will pursue excellence with diligence, perseverance, and continued improvement.
- **Trustworthiness** – demonstrate honesty in our communication and conduct while managing ourselves with integrity and reliability.
LEARNING OBJECTIVES

Many detailed learning objectives of this course can be found before each chapter in your textbook. Key objectives are summarized below (see also the COBE Core Curriculum coverage table at the end of this syllabus. Upon completion of this course, each student should be able to:

• Understand the functions and roles of major components of an IT system, including hardware, operating systems, applications software, data and information management, networks, rules and procedures, and personnel.

• Explain basic networking concepts and applications in use today, including data and voice communications, circuit and packet switching, multiplexing, compression, distributed processing, etc.

• Distinguish between many types of networks and their uses, including PANs, LANs, WLANs, MANs, VPNs, and WANs.

• Define the seven layers of the OSI model and their functions, and compare these to layers in the widely-implemented TCP/IP model.

• Describe basic elements, functions, and standards related to the Internet.

• Distinguish between analog and digital data, signals, and transmission and understand the terminology and characteristics of each.

• Differentiate physical layer wired and wireless media, describe their characteristics, and apply media selection criteria of cost, speed, distance, expandability, environment, and security.

• Describe common network devices and their related standards, uses, and modes of operation.

• Identify types of errors and methods of error control commonly found in computer networks.

• Define the functions, physical and logical network topologies, and medium access control techniques of local area networks.

• Identify reasons for internetwork connections, and describe the roles of hubs, switches, bridges, routers, and other internetworking devices.

• Describe network operating system components and functions, and compare and contrast popular alternatives.

• Differentiate wide area network functions and characteristics and describe how circuit switched, datagram packet switched, and virtual circuit packet switched networks work.

• Describe major Internet applications and services such as Web servers and email, how IP is used to create a connection, the role of TCP and network reliability, the relationship between TCP/IP and ICMP, UDP, and ARP.

• Describe the role of the Domain Name System and conversion of a URL to a dotted decimal IP address.

• Identify basic telephone systems and features of ISDN, frame relay, DSL, voice over IP, and class of service solutions.
• Understand basic security measures such as firewalls, encryption, and passwords; and describe business alternatives of PKI, digital signatures and certificates.

• Describe the systems development life cycle aspects of network design and management.

• Assess both current and emerging telecommunications technologies in terms of their capabilities, applications, and limitations.

• Appreciate the role and impact of Web 2.0 and social networking technologies to people and organizations. Additionally, this course strives to improve both written and verbal communication skills through a variety of learning activities, including oral and written class reports, and the semester project with presentation or video production.

Additionally, ITM305 touches on each of the following items from the College of Business core objectives:

<table>
<thead>
<tr>
<th>Students in this class will learn or practice the following COBE Core Curriculum concepts, methods, and skills:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand and apply analytical and disciplinary concepts and methods related to business and economics:</td>
</tr>
<tr>
<td>1.2. Business Policy and Strategy</td>
</tr>
<tr>
<td>1.5. Information Technology Management</td>
</tr>
<tr>
<td>2.1. Communicate effectively: Write messages and documents that are clear, concise, and compelling</td>
</tr>
<tr>
<td>2.2. Communicate effectively: Give oral presentations that use effective content, organization, and delivery</td>
</tr>
<tr>
<td>3. Solve problems, including unstructured problems, related to business and economics using the COBE Problem Solving Model</td>
</tr>
<tr>
<td>4. Use effective teamwork and collaboration skills</td>
</tr>
<tr>
<td>5. Resolve ethical issues related to business and economics</td>
</tr>
</tbody>
</table>

ASSESSMENT

Student achievement of the above objectives will be measured by a combination of factors, including, but not limited to:

• Written examinations - proving knowledge acquisition and understanding of foundation topics

• Homework assignments - demonstrating practical application of and/or further exploration of foundation topics

• Project reports - demonstrating written & communication abilities

• Classroom presentations - demonstrating the ability to organize and present information to others in a coherent and effective way

• In-class exercises and quizzes, some of which will not be announced in advance

• (Lab assignments are assessed separately in the lab section ITM305L)

Threshold Activities: This course has a threshold level of activities that you are expected to complete to pass the course. YOU WILL BE PENALIZED IF YOU MISSED MORE THAN 2 HOMEWORK ASSIGNMENTS. EACH MISSED ASSIGNMENT AFTER THE INITIAL WILL COST YOU -30pts per assignment. (E.g. A student missed 5 homework assignments in the semester, his/her final grade will be penalized by 3x30pts = 90pts. PLEASE REMEMBER THAT WE
DO NOT ACCEPT ANY LATE ASSIGNMENT UNLESS YOU HAVE A VALID REASON WITH OFFICIAL DOCUMENTATION (E.g. Attending your cousin’s wedding is not a valid excuse). IF YOU HAVE A VALID EXCUSE THAT MIGHT CAUSED YOU TO MISS THE HOMEWORK DEADLINE, YOU MUST DISCUSS THIS MATTER WITH YOUR INSTRUCTOR AT LEAST A WEEK OR EARLIER IN ADVANCED.

ALL HOMEWORK ASSIGNMENT IS DUE by 11:59pm EVERY WEDNESDAY. Please complete your assignment early before the due date. Assignment posted on 12:00am SUNDAY IS CONSIDERED AS LATE AND WILL NOT BE GRADED.

Attendance: If you are absence more than 4 times during the semester without a valid excuse, you will have your overall grade reduced by 50 pts per absence. (Ex. If you missed 6 classes during the semester without any valid excuse, you will be penalized 50pts x 2 = -100pts). Valid Absence Excuses that we accept in this class are the following: Valid Medical Excuse or Commitment (Letter from your Physician must indicate; Date Allocation, Signed, Dated & Contact Info (Email & Tel)), Valid Employment Excuse letter (Letter from your Manager must include; Date Allocation, Signed, Dated & Contact Info (Email & Tel)) & Valid Boise State University Athletics Department COMMITMENT OR OTHER UNIVERSITY COMMITMENT (Letter from the School Dean or Department Chair must include; Date Allocation, Signed, Dated & Contact Info (Email & Tel)). ALL OTHER EXCUSES ARE CONSIDER AS A NON VALID EXCUSE.

ATTENDANCE WILL ONLY BE TAKEN ONCE IN CLASS. IF YOU ARE NOT PRESENT WHEN WE CALL YOUR NAME, YOU ARE CONSIDERED AS NOT PRESENT. Do not be late for class.

Everybody will be treated EQUALLY. DO NOT ask or email for ANY SPECIAL PERSONAL TREATMENT. If there is any extra credit available it will be announced & be available to EVERY STUDENT.

You are REPSNSIBLE TO CHECK YOUR GRADE ON BLACKBOARD GRADE. YOU HAVE EXACTLY ONE WEEK TO REPORT ANY ERROR ON YOUR HOMEWORK GRADE AFTER IT IS POSTED ON BLACKBOARD. NO ADJUSTMENT WHATSOEVER IN ANY HOMEWORK GRADE WILL BE MADE ONCE IT IS PAST THAT ONE WEEK PERIOD REGARDLESS OF ANY CIRCUMSTANCE.

OTHER TECHNOLOGIES USAGE

We may use other technologies such as Web space for each student, Google Sites, Groups, and Docs, Wikis, blogs, Twitter, YouTube, discussion forums and lists, etc. More information will be provided when needed. There will be a mix of hands-on activities between the lecture and lab sections, with most of the hands-on assignments being in the lab section.

TECHNICAL SUPPORT

Technical support for your Boise State accounts and passwords (including myBoiseState and BroncoMail) is provided by the campus Office of Information Technology (OIT). They can be reached at 426-HELP or helpdesk@boisestate.edu. They also have an MBEB Zone area on the 2nd floor of MBEB. Technical support for ITM classes is also provided by OIT and their staff is available all over campus. The closest ZONE Area Technical Support to MBEB is located at the ILC building. Please address all technical support issues regarding COBE-specific systems to the OIT team.

GRADING

Project and homework guidelines will be distributed separately. Below is a preliminary approximate breakdown of points (some refinement may occur over the semester). All Grades will be posted on blackboard.
<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>100 pts</td>
</tr>
<tr>
<td>Exam 2</td>
<td>100 pts</td>
</tr>
<tr>
<td>Exam 3</td>
<td>100 pts</td>
</tr>
<tr>
<td>Homework (10x)</td>
<td>100 pts</td>
</tr>
<tr>
<td>Project</td>
<td>100 pts [will have multiple different components].</td>
</tr>
</tbody>
</table>

Total: 500 pts

Grades will be assigned as follows: 97 - 100 A+ ; 94 – 96.999 A ; 90 – 93.999 A- ; 87 – 89.999 B+ ; 84 – 86.999 B 80 – 83.999 B- ; 77 – 79.999 C+ ; 74 – 76.999 C ; 70 – 73.999 C- ; 67 – 69.999 D+ ; 64 – 66.999 D ; 60 – 63.999 D- 59 and below F.

WE FOLLOW THE GRADING SCALE STRICTLY. YOU WILL STILL BE A- if your final grade is 93.999%

Note that ITM 305L, the 1-credit lab associated with this course, is graded separately. We **DO NOT** have any extra credit work available and we will **NOT DROP** any exam score in the semester. Please put forward you best effort towards all of your work.

**Exams** - Each exam addresses a segment of the course and focuses on your understanding of the key concepts, techniques, and tools covered in that segment. All exams will be Blackboard tests taken at the BSU testing center, & covering conceptual & applied learning. Questions may include multiple choice, completion, ordering, & short answer.

**Note:** **WE DO NOT OFFER MAKEUP EXAM.** If you end up missing an exam date due to illness or other **MAJOR OFFICIAL** issue (E.G, attending your cousin’s wedding IS NOT A MAJOR ISSUE), please contact the instructor & we will attempt to reach an agreeable makeup time, **YOU MUST PROVIDE AN OFFICIAL NOTE FROM YOUR DOCTOR/MANAGER/THE CHAIR OF YOUR DEPARTMENT/UNIVERSITY ATHLETIC’s OFFICE.** Please contact the professor to set this up **BEFORE THE EXAM DATE.**

**Academic Honesty** - Each of you is expected to comply with the Boise State University standard of conduct for academic integrity, as outlined by the Student Conduct Office. You assume full responsibility for the content and integrity of the academic work you submit. Academic dishonesty is taken seriously; any student violating the BSU standard of conduct will be subject to disciplinary action, including receiving a failing grade (F) in the course. Multiple submissions of the same homework document will result in zeros for all parties for the first instance, and disciplinary action for further events.

**The COBE Writing Style Guide** includes examples of how to correctly cite ideas and quotations from a variety of sources, and you are expected to follow its standards. The guiding principle of academic integrity is that any work you submit with your name on it, must be “your own work.” That means you wrote it, they are your ideas, you solved the problems, you researched what other people said, etc. Copy and pasting from any website, Wikipedia or any online resources without proper credit and reference CLEARLY VIOLATED THIS POLICY. Failure to properly cite and reference your sources is considered plagiarism, and is a violation of the Digital Millennium Copyright Act, as well as of the BSU Student Conduct guidelines. On writing assignments, **15-20% of your grade** will be based on your writing, including formatting, spelling and reference citation, in addition to content.
• **When you borrow ideas**—whether or not you use the exact words someone else used—you must clearly show that those ideas belong to someone else, and to whom they belong. This is called a “citation” in the text with those ideas, and a “reference” to the full source where the ideas were found.

• **When you borrow exact words, phrases or sentences**, you must also enclose the words in quotation marks (and include the citation and reference). The reader must be able to easily tell that something came from someone other than you.

**Individual assignments** - you are expected to do activities yourself. You may discuss homework with other students, but the specific ideas and their expression must be yours and yours alone. If the ideas expressed on your paper are too similar to another student’s—whose name is not on the paper--this is plagiarism. The first time you will receive a warning and no credit. The second time will be an automatic F for the course.

**Learning Accommodations**: Students with disabilities needing accommodations to fully participate in this class should contact the Disability Resource Center (DRC). All accommodations MUST be approved through the DRC. Please stop by Administration 114, call 208-426-1583, or email DRCinfo@boisestate.edu to make an appointment with a disability specialist. To learn more about the accommodation process, visit the DRC website: [http://drc.boisestate.edu](http://drc.boisestate.edu).

**GENERAL EXPECTATIONS**

Because this is a business course, the expectations are the same as those for an employer. Your grade is the equivalent of a performance evaluation.

- **Plan and schedule ahead.** If you go to work unprepared, your boss and colleagues will question why they hired you.

- **Meet your due dates.** If you do not complete your work on time, you will be poorly evaluated, or fired. If you do not turn in your homework on time, your instructor will give you fewer points, or none at all.

- **Show up for work.** Participate in class & online with your team mates regularly/daily

- **Be there, completely.** Actively participate in team discussions, ask questions to the class discussion if something isn’t clear.

- **Take initiative.** Contact/visit the professor during office hours or by appointment to ask questions, discuss an idea from class, or just to get to know them.

**Boise State Statement of Shared Values**: Boise State University upholds the following values as the foundation for a civil and nurturing environment. Campus community members and all who are part of COBE are expected to adhere to the following values.

- **Academic Excellence** – engage in our own learning and participate fully in the academic community’s pursuit of knowledge.
- **Caring** – show concern for the welfare of others.

- **Citizenship** – uphold civic virtues and duties that prescribe how we ought to behave in a self-governing community by obeying laws and policies, volunteering in the community, and staying informed on issues.
• Fairness – expect equality, impartiality, openness and due process by demonstrating a balanced standard of justice without reference to individual bias.

• Respect – treat people with dignity regardless of who they are and what they believe. A respectful person is attentive, listens well, treats others with consideration and doesn’t resort to intimidation, coercion or violence to persuade.

• Responsibility – take charge of our choices and actions by showing accountability and not shifting blame or taking improper credit. We will pursue excellence with diligence, perseverance, and continued improvement.

• Trustworthiness – demonstrate honesty in our communication and conduct while managing ourselves with integrity and reliability.

This is a tentative Syllabus & might change at the discretion of the Instructor.