

ITT Technical Institute

PM331

Overview of Digital Technology

Onsite Course

SYLLABUS

Credit hours: 4

Contact/Instructional hours: 50 (30 Theory Hours, 20 Lab Hours)

Prerequisite(s) and/or Corequisite(s):

None.

Course Description:

This course emphasizes the use of digital technology to develop distinct competitive advantage in relations with competitors, customers and suppliers with respect to products and services and related projects. It examines the impact of technology on the global business community and business processes.

Syllabus: Overview of Digital Technology

Instructor: _____

Office hours: _____

Class hours: _____

Major Instructional Areas

1. Individuals in a technical organization
2. The business strategy in a technical organization
3. Opportunities for a technical organization in the digital global environment
4. Competitive advantages for a technical organization in the digital global environment
5. The role of a project manager in the digital global environment

Course Objectives

1. Analyze the relationship between business pressures, organizational responses, and information systems.
2. Compare the role of a project manager in relation to business-oriented people—the suits—and technology-oriented people—the geeks.
3. Analyze how to manage data by using information systems to make effective business-related decisions.
4. Examine various applications of information systems in the modern business environment.
5. Analyze how project managers can positively influence the profitability of an organization by planning, implementing, and maintaining information systems.
6. Analyze the impact of the World Wide Web (WWW) and the Internet on business operations.
7. Examine the ethical and security issues related to the use of information systems in the modern business environment.
8. Analyze the impact of technological developments on the managerial support systems used by business operations.
9. Use the resources of the ITT Tech Virtual Library to research and analyze the role of information technology in managing modern organizations.

SCANS Objectives

SCANS is an acronym for Secretary's Commission on Achieving Necessary Skills. The committee, created by the National Secretary of Labor in the early 1990s, created a list of skills and competencies that the committee feels are necessary for employees to function in a high-tech job market.

1. Explain the trends in technological changes and deduce how the change will affect the status quo.
2. Describe the role of technology in modern organizations.
3. Demonstrate how to use appropriate technology to perform a task.
4. Determine the desired outcomes and applicable constraints of technology used in modern organizations.
5. Demonstrate competence in using information systems to acquire and organize information.
6. Apply new knowledge and skills in both familiar and changing situations.

Course Outline

Note: All graded activities, except the Project, are listed below in the pattern of <Unit Number>.<Assignment Number>. For example, Lab 2.1 refers to the 1st lab activity in Unit 2.

Unit	Activities
1—Modern Organizations in the Global Web-Based Environment	<ul style="list-style-type: none"> • Content Covered: <ul style="list-style-type: none"> <i>Introduction to Information Systems Supporting and Transforming Business:</i> <ul style="list-style-type: none"> ○ Chapter 1, "The Modern Organization in the Global, Web-Based Environment," pp. 4-7, stop at section 1.1 titled, "Business Processes and Business Process Management," and pp.15-27 <i>A Guide to the Project Management Body of Knowledge (PMBOK® Guide)- Fourth Edition:</i> <ul style="list-style-type: none"> ○ Chapter 1, "Introduction," pp. 5-7 ○ Chapter 2, "Project Life Cycle and Organization," pp. 23-27 Chapter 4, "Project Integration Management," p. 87 • Writing Assignments: 1.1 • Labs: 1.1
2—Information Systems: Concepts and Management	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business:</i> <ul style="list-style-type: none"> ○ Chapter 2, "Information Systems: Concepts and Management" • Exercises: 2.1 • Research Assignments: 2.1 • Labs: 2.1
3—Ethics, Privacy, and Security of Information	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business:</i> <ul style="list-style-type: none"> ○ Chapter 3, "Ethics, Privacy, and Information Security" • Quizzes: 3.1 • Exercises: 3.1 • Writing Assignments: 3.1 • Course Project Part 1 • Labs: 3.1
4—Data and Knowledge Management	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business:</i> <ul style="list-style-type: none"> ○ Chapter 4, "Data and Knowledge Management," pp. 124-144, stop at section 4.5 titled, "Data Governance"

Unit	Activities
	<ul style="list-style-type: none"> • Quizzes: 4.1 • Exercises: 4.1 • Writing Assignments: 4.1 • Labs: 4.1
5—Network Applications	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business</i>: <ul style="list-style-type: none"> ○ Chapter 5, “Network Applications,” pp. 160-184 ○ Technology Guide 5, “Basics of the Internet and the World Wide Web,” pp. 518-522 • Quizzes: 5.1 • Exercises: 5.1 • Research Assignments: 5.1 • Course Project Part 2 • Labs: 5.1
6—E-Business and E-Commerce	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business</i>: <ul style="list-style-type: none"> ○ Chapter 6, “E-Business and E-Commerce,” pp. 198-206, stop at section 6.2 titled, “Business-to-Consumer (B2C) Electronic Commerce,” and pp. 217-227, sections 6.4 and 6.5 titled, “Electronic Payments” and “Ethical and Legal Issues in E-Business” • Quizzes: 6.1 • Exercises: 6.1 • Writing Assignments: 6.1 • Labs: 6.1
7—Wireless, Mobile Computing, and Mobile Commerce	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business</i>: <ul style="list-style-type: none"> ○ Chapter 7, “Wireless, Mobile Computing, and Mobile Commerce,” pp. 238-261 ○ Technology Guide 3, “Protecting Your Information Assets” Access this resource from the following Web site: http://higheredbcs.wiley.com/legacy/college/rainer/0470473525/tech3/techguide3.pdf (accessed May 13, 2011) • Quizzes: 7.1 • Exercises: 7.1 • Labs: 7.1
8—Organizational Information Systems	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business</i>: <ul style="list-style-type: none"> ○ Chapter 8, “Organizational Information Systems” ○ Chapter 9, “Customer Relationship Management” ○ Chapter 10, “Supply Chain Management” ○ Technology Guide 2, “Computer Software,” pp. 452-465 • Quizzes: 8.1 • Exercises: 8.1 • Writing Assignments: 8.1 • Labs: 8.1
9—Managerial Support Systems	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business</i>: <ul style="list-style-type: none"> ○ Chapter 11, “Managerial Support Systems” ○ Technology Guide 1, “Computer Hardware,” pp. 422-444 • Quizzes: 9.1 • Exercises: 9.1

Unit	Activities
	<ul style="list-style-type: none"> • Labs: 9.1 • Course Project Part 3
10—Acquiring Information Systems and Applications	<ul style="list-style-type: none"> • Read from <i>Introduction to Information Systems Supporting and Transforming Business</i>: <ul style="list-style-type: none"> ◦ Chapter 12, “Acquiring Information Systems and Applications” • Quizzes: 10.1 • Exercises: 10.1 • Research Assignments: 10.1 • Labs: 10.1
11—Course Review and Course Project	<ul style="list-style-type: none"> • Course Project Presentation

Instructional Methods

The purpose of this course is to examine how businesses use technology and information systems to increase profitability, gain market share, improve customer service, and manage daily operations. The course will introduce you to the contemporary business environment, technologies, and project management techniques to pave the way for your success as a member of a project team or a leader of a modern organization.

The content will be delivered using multiple styles such as lectures, in-class discussions for collaborative learning, and hands-on laboratory activities. The course will keep you actively engaged in the learning process. Difficult concepts, immediately after being covered in a classroom lecture, will be reinforced by lab exercises. To tie together multiple fundamental concepts, you will work on a course project.

The course consists of both theory and laboratory components; therefore, before coming to each class, prepare for the theory portion by reading the assigned chapters. Complete all weekly assignments to ensure full comprehension of the subject.

You will be assessed on the basis of your performance in labs, exercises, the course project, quizzes, writing assignments, and research assignments.

Instructional Materials and References

Student Textbook Package

Rainer Jr., R. Kelly, and Casey G. Cegielski. *Introduction to Information Systems: Supporting and Transforming Business*. 3rd ed. Hoboken, New Jersey: John Wiley & Sons, Inc., 2011.

Other Required Resources

Student Companion Site

<http://bcs.wiley.com/he-bcs/Books?action=index&bcsId=5314&itemId=0470473525> (accessed May 13, 2011)

This Web site gives you access to the rich tools and resources available for this text.

In addition to the student textbook package, the following is also required in this course:

Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. 4th ed. Newtown Square, PA: PMI Publications, 2008.
 (This book is normally issued in this quarter with the following course: Introduction to Project Management. If students have not registered for that course the book will be issued in this course.)

References

ITT Tech Virtual Library

Log on to the ITT Tech Virtual Library at <http://library.itt-tech.edu/> to access online books, journals, and other reference resources selected to support ITT Tech curricula.

Books

You may click “Books” or use the “Search” function on the home page to find the following books.

Books 24x7

- Baschab, John, and Jon Piot. *The Executive's Guide to Information Technology*. 2nd ed. Hoboken, NJ: John Wiley & Sons, 2007.
- Chu, Margaret, Diane Altwies, and Edward Walker. *Achieve PMP Exam Success PMBOK® Guide: A Concise Study Guide for the Busy Project Manager*. 3rd ed. Fort Lauderdale: J. Ross Publishing, 2006.
- Gunasekaran, Angappa, Omar Khalil, and Syed Mahbubur Rahman. *Knowledge and Information Technology Management: Human and Social Perspectives*. Hershey, PA: Idea Group Publishing, 2003.
- Hackney, Ray, and Dennis Dunn. *Business Information Technology Management Alternative and Adaptive Futures*. NY: Palgrave Macmillan, 2000.
- Kendrick, Tom. *The Project Management Tool Kit: 100 Tips and Techniques for Getting the Job Done Right*. U.S.: AMACOM, 2004.
- Khosrowpour, Mehdi. *Challenges of Information Technology Management in the 21st Century: 2000 Information Resources Management Association International Conference*. Hershey, PA: Idea Group Publishing, 2000.
- Khosrow-Pour, Mehdi. *Emerging Trends and Challenges in Information Technology Management*. Hershey, PA: IGI Publishing, 2006.
- Project Management Institute, Inc. *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*. 4th ed. Newtown Square, PA: PMI Publications, 2008.
- Stahl, Bernd Carsten. *Responsible Management of Information Systems*. Hershey, PA: Idea Group Publishing, 2004.
- Tan, Felix. *Global Perspective of Information Technology Management*. Hershey, PA: Idea Group Publishing, 2002.

NetLibrary

- Shim, Jae K., and Joel G. Siegel. *The Vest Pocket Guide to Information Technology*. 2nd ed. Hoboken, NJ: John Wiley & Sons, 2005.

Ebrary

- Brandon, Dan. *Project Management for Modern Information Systems*. Hershey, PA: IRM Press, 2005.

- Khosrow-Pour, Mehdi. *Managing Modern Organizations with Information Technology*. Hershey, PA: Idea Group Publishing, 2005.
- Lan, Yi-chen. *Global Information Society: Operating Information Systems in a Dynamic Global Business Environment*. Hershey, PA: Idea Group Publishing, 2005.
- Nemati, Hamid R., and Christopher D. Barko. *Organizational Data Mining: Leveraging Enterprise Data Resources for Optimal Performance*. Hershey, PA: Idea Group Inc., 2003.
- Szewczak, Edward J., and Coral R. Snodgrass. *Managing the Human Side of Information Technology: Challenges and Solutions*. Hershey, PA: Idea Group Publishing, 2002.

Periodicals

You may click “Periodicals” or use the “Search” function on the home page to find the following periodicals.

EbscoHost> EBSCOhost Databases

- *International Journal of Information Management*
Peer-reviewed coverage of the developing field of information management, linking practitioners and contributors to developments in disciplines such as computer science, economics, social psychology, management, and public administration
- *Journal of Organizational Computing & Electronic Commerce*
Research articles on the impact of computer and communication technology on organizational design, operations, and performance
- *MIS Quarterly*
Articles on the practice or theory of information management, the use for managerial purposes, and the management of information technology for both academics and those applying information systems to organizational problems
- *MIT Sloan Management Review*
Refereed articles, commentary, and reviews by management academics, consultants, and practitioners on what is most useful in current management theory and articles on cross-functional perspectives on management issues written for professional managers

Reference Resources

You may click “Reference Resources” or use the “Search” function on the home page to find the following reference resources.

- Business
- Project Management

School of Study

You may click “School of Study > School of Business” on the home page to find the following links.

- Professional Organizations>
 - American Society for the Advancement of Project Management
 - International Association of Project & Program Managers
 - International Project Management Association
 - International Research Network on Organizing by Projects
 - National Management Association
 - The Project Management Forum
 - Project Management Institute

- Recommended Links

Other References

The following resources may be found **outside** of the ITT Tech Virtual Library, whether online or in hard copy.

Web sites

- **A Project Management Primer**
The following site is a succinct guide to the art and discipline of project management: <http://www.exinfm.com/training/pdfiles/projectPrimer.pdf> (accessed January 24, 2013)
- **Project Management 101**
The following site has a guide to the basic knowledge needed to be a successful project manager: <http://management.about.com/cs/projectmanagement/a/PM101.htm> (accessed January 24, 2013)
- **Project Management Information**
The following site has a library of information about project management: http://www.managementhelp.org/plan_dec/project/project.htm (accessed January 24, 2013)
- **The Job of the Project Manager**
The following site contains content from various training materials developed for the World Bank: http://www.maxwideman.com/guests/pm_job/intro.htm (accessed January 24, 2013)
- **Why Project Management?**
Answers to this question, as well as other useful topics, such as the merits of project management and project management direction, are available at this Web site: <http://www.maxwideman.com/issacons/iac1002a/index.htm> (accessed January 24, 2013)

All links to Web references are subject to change without prior notice.

Course Evaluation and Grading

Evaluation Criteria Table

The final grades will be based on the following categories:

CATEGORY	WEIGHT
Exercises	10%
Research Assignments	15%
Writing Assignments	20%
Quizzes	15%
Labs	20%
Course Project	20%
TOTAL	100%

Note: Students are responsible for abiding by the Plagiarism Policy.

Grade Conversion Table

The final grades will be calculated from the percentages earned in the course, as follows:

A	90–100%	4.0
B+	85–89%	3.5
B	80–84%	3.0
C+	75–79%	2.5
C	70–74%	2.0
D+	65–69%	1.5
D	60–64%	1.0
F	<60%	0.0

(End of Syllabus)