Syllabus, Spring 2014
Department of Marketing & Information Systems
Richard J. Wehle School of Business
Canisius College

ISB 101 Management Technology
Section C

PROFESSOR: Dr. L. Volonino, CISSP, ACFE
OFFICE: Tower 504
TEL: 716/888.2219

COMMUNICATION: Use the discussion folder in the CONTENT area of Angel to ask questions. Other communication options are to meet with me in my office or before/after class. Use these methods instead of e-mail.

1. CANISIUS COLLEGE POLICIES

   Academic Calendar: www.canisius.edu/academics/academic_calendar.asp
   Academic Integrity Policy: http://www.canisius.edu/integrity/
   DSS: www.canisius.edu/resources/sass/disability-support/

If you have any condition which make it difficult for you to carry out the course work or which will require extra time on examinations, please notify me to make appropriate arrangements.

2. COURSE DESCRIPTION

   Businesses are experiencing digital transformations. Digital technology such as social media, cloud computing, big data analytics, 4G networks, sensors, and location-aware devices are reengineering how business is done. Technology is driving changes unimaginable a decade ago. And more data are collected in a day now than existed in the world 10 years ago. Digital technology creates greater operational efficiencies, drives more commerce, engages customers more deeply, and gives companies competitive advantages. Business leaders want to know what steps to take to get a jump on digital disruption and move their businesses forward.

   Faced with opportunities and challenges, you will be tackling digital challenges and opportunities coming your way. In this course, you learn how to do business in digital times and how organizations are leveraging digital technology to take advantage of what's newly possible.

3. LEARNING OBJECTIVES

   After the course, students are able to:
   1. analyze data using Microsoft Excel and interpret results
   2. perform big data analytics using Tableau data visualization software
   3. evaluate how IT impacts financial performance, growth, innovation, and sustainability
   4. examine information ethics, security, privacy and other legal issues, and green computing.
   5. demonstrate information literacy and the ability to communicate effectively.
   6. present your analysis of an IT case using cloud-based presentation software and social media.
4. REQUIRED TEXTBOOKS & Supplies—Verify the ISBNs to get the correct books

**Textbook**
E. Turban, L. Volonino, G. R. Wood
**ISBN-13:** 978-1118357040

**Software book**
Robert Grauer, et al
**ISBN** 978-0135098592

**Required supplies**
1. notebook, pen/pencil for taking notes
2. stapler
3. flash drive for storing and transporting files

5. COURSEWARE: Angel is used extensively throughout the semester. You are responsible for checking Announcements and the Content areas on Angel several times a week.

6. TOPICS COVERED IN THIS COURSE & ASSOCIATED TEXTBOOK CHAPTERS

*Part I Maximizing the Value of Data and Information Technology*

1. **A Look Toward the Future of Information Technology**
   1.1 IT and Management Opportunities and Challenges 4
   1.2 Top Management Concerns and Influential ITs 7
   1.3 IT Agility, Consumerization, and Competitive Advantage 13
   1.4 Strategic Planning and Competitive Models 15
   1.5 Why IT is Important to Your Career, and IT Careers 20

2. **Information Management and IT Architecture**
   2.1 Information Management in the 2010s 32
   2.2 IT Architecture 36
   2.3 Information Systems and IT Infrastructure 38
   2.4 Cloud Computing and Services 47

3. **Database, Data Warehouse, and Data Mining**
   3.1 Database Technology 60
   3.2 Data Warehouse and Data Mart Technologies 69
   3.3 Data and Text Mining 72
   3.4 Business Intelligence (BI) and Analytics 75
   3.5 Digital and Physical Document Management 78

4. **Networks, Collaboration, and Sustainability**
   4.1 Business IT Networks and Components 88
   4.2 Wireless Network Applications and Mobile Infrastructure 93
   4.4 Collaboration and Communication Technologies 102
   4.5 Sustainability and Ethical Issues 104

5. **CyberSecurity, Compliance, and Business Continuity**
   5.1 Up Close Look at Cybercrimes, Criminals, and Motivations 116
   5.2 IT Vulnerabilities and Threats 122
   5.3 Defending Against Fraud 130
5.4 Information Assurance and Risk Management 131
5.6 Internal Control and Compliance 137

Part II Digital, Mobile and Social Commerce

6 E-Business & E-Commerce Models and Strategies
6.1 E-Business Challenges and Strategies 156
6.2 Business to Consumer (B2C) E-Commerce 166
6.3 Business to Business (B2B) E-Commerce and E-Procurement 169
6.6 E-Business Ethics and Legal Issues 182

7 Mobile Technologies and Commerce
7.1 Mobile Computing Technology 194
7.2 Mobile Commerce 199
7.3 Mobile Transactions and Financial Services 206
7.4 Location-Based Services and Commerce 210
7.5 Mobile Enterprise Applications 214

8 Web 2.0 and Social Media
8.1 Web 2.0 and Social Media 229
8.2 Virtual Communities and Social Networking Services 237
8.3 Enterprise 2.0—Social Networks and Tools for Business 245
8.4 Social Media Metrics 250

Part III Enterprise Systems and Analytics

9 Functional Area and Compliance Systems
9.1 Management Levels and Functional Systems 272
9.2 Manufacturing, Production, and Transportation Systems 276
9.3 Sales and Marketing Systems 282
9.4 Accounting, Finance, and Compliance Systems 285
9.5 Human Resources Systems, Compliance, and Ethics 292

10 Enterprise Systems and Applications
10.1 Enterprise Systems 304
10.2 Enterprise Resource Planning (ERP) Systems 307
10.3 Supply Chain Management (SCM) Systems 315
10.4 Collaborative Planning, Forecasting, and Replenishment (CPFR) Systems 320
10.5 Customer Relationship Management (CRM) Systems 324

11 Performance Management using Data Visualization, Mashups, & Mobile Intelligence
11.1 Data Visualization and Data Discovery 338
11.2 Enterprise Data Mashups 343
11.3 Business Dashboards 347

Part IV IT Planning, Strategy, and Ethics

14 IT Ethics and Responsible Conduct
14.1 Can IT Cut its Global Carbon Footprint? Can Users? 422
14.2 Responsible Conduct 428
14.3 Connectivity Overload and a Culture of Distraction 431
14.4 On the Verge of a New Tech Revolution 433
7. GRADING POLICY

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
<th>Weighted credits</th>
</tr>
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<tbody>
<tr>
<td>In-class course work and homework</td>
<td>35%</td>
<td>35</td>
</tr>
<tr>
<td>Team research, case analysis, and oral presentation</td>
<td>10%</td>
<td>10</td>
</tr>
<tr>
<td>Class participation, contribution, reflective thinking, and professional conduct</td>
<td>10%</td>
<td>10</td>
</tr>
<tr>
<td>Midterm Exam, open book</td>
<td>20%</td>
<td>20</td>
</tr>
<tr>
<td>Final Exam, open book</td>
<td>25%</td>
<td>25</td>
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<tr>
<td>Total</td>
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Final Course Grades

<table>
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<tr>
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<tr>
<td>A</td>
<td>&gt;= 92.0</td>
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<tr>
<td>A-</td>
<td>&gt;= 90.0</td>
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<tr>
<td>B+</td>
<td>&gt;= 87.0</td>
</tr>
<tr>
<td>B</td>
<td>&gt;= 83.0</td>
</tr>
<tr>
<td>B-</td>
<td>&gt;= 80.0</td>
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<tr>
<td>C+</td>
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<tr>
<td>C</td>
<td>&gt;= 76.0</td>
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<tr>
<td>C-</td>
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<tr>
<td>D</td>
<td>&gt;= 72.0</td>
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<tr>
<td>F</td>
<td>&lt; 72.0</td>
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Download and save a copy of the syllabus to your hard drive or mobile in case Angel is unavailable. Check the syllabus for course policies, coursework, deadlines, and directions. Check Angel often for announcements and feedback.
8. COURSE POLICIES, PROCEDURES, ACADEMIC & ETHICAL STANDARDS

To be fair to all students and to maintain quality academic standards, there are no exceptions to the course syllabus, policies, and procedures except possibly in extraordinary situations that have been approved by the college and the professor.

1. **Transparency, accountability, and integrity underlie all policies for this course.** To avoid attempts to receive unwarranted special treatment, all course-related communication is transparent via the Discussion Folder on Angel. Do not send e-mail for any reason. For personal issues, meet with me in Tower 504.

2. **Attendance is mandatory.** The attendance PIN is presented at the start of class only. You are responsible for entering the Attendance PIN at the start of classes that are held in the lab and then verifying that you had entered the PIN correctly. Adjustments will not be made if you fail to enter the PIN correctly and verify it. Do not interrupt class for the PIN.

3. **Missed Class Sessions.** Missing up to 2 classes or parts of classes (e.g., leaving early or arriving late) will be excused automatically—and will not result in a final grade adjustment. If your absence results in you missing in-class work or a homework deadline, then you will miss credit for that work. If 3 or 4 classes or parts of classes are missed, the final course grade will be adjusted downward one or two grades, respectively. Anyone missing more than 4 classes or parts of classes fails the course. Plan accordingly. This policy applies to all students equally. If sports, a job, vacations, appointments, activities, or any obligation prevents you from attending class, drop the course.

4. Do not enter the attendance PIN unless you are present for the class.

5. Professional conduct, integrity, respect for others, and personal responsibility are mandatory. Interference with other students’ ability to learn and the faculty’s ability to teach will not be tolerated. Class disruptions include, but are not limited to talking, visiting social sites, playing games, texting, tweeting, working on non-class activities, and eating.

6. Academic misconduct, such as cheating, plagiarism, hostility, profanity, or any other violation of the college’s academic integrity standards will result in a downward grade adjustment, including receiving a final grade of F.

7. Check the gradebook on Angel frequently. If a grade is incorrectly recorded or you disagree with a grade, bring the grade to my attention with your explanation within two weeks of the date the work was returned or by the last class session, whichever is first.

8. Bring the textbook to each class; bring the Excel book and flash drive on lab days.


10. Submit all coursework by the deadline. Late work does not receive any credit. There are no make-up exams and no do-overs. The deadline for all in-class work is the end of class.
9. Deadlines & directions for submitting in-class course work and homework

1. Submit all course work as a digital file to the correct Angel Dropbox. Emailed files will be deleted.

2. Excel files and other files need to be submitted to the Dropbox at least 1 hour prior to the start of class. The Dropbox disappears 1 hour prior to the start of class so late submissions are not possible.

3. In-class course work needs to be submitted by the end of the class session, as directed.

   Use the required filename format as shown below. No spaces in the filename and only 1 file extension. Software appends the correct file extension automatically. Check the filename before you submit.

   **Filename Format:**

   ```
   Lastname-Firstname-ISB101c-description.extension
   ```

   *For example: King-Bill-ISB101c-HW1.xlsx*

4. Submit a **stapled** hardcopy of your work at the start of class and in class on the deadline. For Excel work, staple a hardcopy of the cell formulas to the spreadsheet with the spreadsheet on top. Be sure the spreadsheet and cell formulas have a professional appearance, are easily readable, and are stapled in a single direction. Use a professional font and font size.

5. Format **Excel spreadsheets to fit on one page**, unless otherwise directed.

6. Include your name, date, and description (e.g., HW #1) in your files. Additional directions may be given in class or posted on Angel.

7. Proper grammar, spelling, punctuation, sentence structure, capitalization, and formatting are required for all course work.

8. Keep digital and hardcopies of all your course work until final course grades have been posted and you know that you no longer need them.

9. Individual work must be done sufficiently independently. If one, two, or more students or teams submit work that appears not to have been prepared or performed independently to a sufficient degree, all students involved will receive a zero grade and may be removed from the course. Do not share your homework with another student because you risk being removed from the course, or a final grade of F.

10. **CLASS PARTICIPATION**

    Class time will be spent analyzing case studies and digital technology issues in the IT textbook--individually and in teams. To fully benefit from these analyses, you need to be prepared to participate. My subjective assessment of how well you participate in class will be based on factors such as the frequency and quality of your participation in class discussions, the degree to which you have studied the text before class, how well you work with others, and finally, attendance.

    It is your responsibility to insure that I get to know you—your name and capabilities. Take an active role in your learning and take responsibility for knowing what to do and when.
### 11. COURSE SCHEDULE. Changes may be necessary.

<table>
<thead>
<tr>
<th>Week #</th>
<th>Dates shown are Sundays</th>
<th>Chapters for discussion and analysis</th>
<th>Assignments</th>
<th>Deadlines</th>
<th>Every homework is due on TUESDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Jan 12</td>
<td></td>
<td>Text: Chapter 1 Excel: Chapter 1 Intro to Excel Read CHAPTER 1 Office Fundamentals and File Management if you do not know this material.</td>
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<td>After reading the course policies and procedures, introduce yourself to your classmates in the Week 1 Introduction folder. You post confirms that you agree to comply w/ course policies and procedures.</td>
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<tr>
<td>#2 Jan 19</td>
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<td>Text: Chapter 2 Excel: Chapter 2</td>
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<td>#3 Jan 26</td>
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<td>Text: Chapter 3</td>
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<td>Homework #1</td>
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<td>#4 Feb 2</td>
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<td>Text: Chapter 4 Excel: Chapter 3</td>
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<tr>
<td>#5 Feb 9</td>
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<td>Text: Chapter 5</td>
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<td>Homework #2</td>
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<tr>
<td>#6 Feb 16</td>
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<td>Text: Chapter 6 *Tues, 2/18 no class President’s Holiday</td>
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<tr>
<td>#7 Feb 23</td>
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<td>Text: Chapter 7 Excel: Chapter 4</td>
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<td>Homework #3</td>
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<td>#8 March 2</td>
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<td>Text: Chapter 8</td>
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<tr>
<td>#9 March 9</td>
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<td>Midterm:</td>
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<tr>
<td><strong>Spring break the week of March 16</strong></td>
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<td>#10 March 23</td>
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<td>Text: Chapter 9</td>
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<td>#11 March 30</td>
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<td>Text: Chapter 10</td>
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<td>Homework #4</td>
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<td>#12 April 6</td>
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<td>Text: Chapter 11 *Thurs 4/10 is a cyberclass session</td>
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<tr>
<td>#13 April 13</td>
<td></td>
<td>Text: Chapter 14 *Thurs, 4/17 no class Easter break</td>
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<tr>
<td>#14 April 20</td>
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<td>Team Presentations of Case Analysis</td>
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<td>Homework #5</td>
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<td>#15 April 27</td>
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<td>Team Presentations of Case Analysis</td>
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<tr>
<td><strong>May 4</strong></td>
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<td></td>
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<td><strong>Final exam as scheduled by the registrar</strong></td>
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