IIST424_9040 / IINF424_9191
Hardware and Operating Systems Essentials

Instructor

Chun-Shuo Chen

Email: cc7842@albany.edu
Course Website: bls.its.albany.edu
                      This course uses the Blackboard Learning System.
                      Course materials may be available through the system.
Class Meetings: Tuesdays/Thursdays 1:15pm - 2:35pm in Humanities 020
                      Uptown Campus > Academic Podium > Humanities
                      (http://ualbanyits.org/maps/building.php?ID=13)
Office Hours: Tuesdays/Thursdays 3:00pm - 4:00pm in LI 72
                      Uptown Campus > Academic Podium > Adjacent to Our Undergraduate
                      Advising Office (LI 73)
                      (http://apps.albany.edu/maps/building.php?ID=98)

I.   Course Overview

This course examines fundamental aspects on contemporary information systems, including internal components, storage elements, and peripheral devices. Critical issues associated with information systems, including planning, organizing, and managing information technology (IT) will be introduced.

II.   Course Objectives

It is expected that students who finish this course will have been exposed to, and be able to discuss:

1. Foundation concepts: Fundamental questions about the role of information systems;

2. Information technologies: The hardware, software, and data resource management and telecommunications network technologies used in information systems, and their implications for information professionals;

3. Organizational applications: How applications of information systems are accomplished in today's networked enterprises;

4. Development processes: The processes of planning, developing, and implementing IT-based applications; and

5. Management challenges: How information professionals can manage the successful use of information technologies in a global economy.

III. Basic Textbook

The basic textbook for the course is:

James A. O'Brien & George Marakas (2007). Introduction to Information Systems.

Edition Number: 14

Publisher: The McGraw-Hill Companies

ISBN-13: 9780077240585

Pages: 557

Available at the University Bookstore in the uptown campus. (http://albany.bncollege.com/webapp/wcs/stores/servlet/TBWizardView?catalogId=10001&storeId=19071&langId=-1&level=1)

IV. Tentative Course Outline

Module I: Foundation Concepts
Week 1, Tuesday, August 26 – Course Introduction   Reviewing syllabus   Course introductions   Course policies and expectations   Signing up the Case Presentation list   Signing up the LISTSERV system (IIST424-F08)
Week 1, Thursday, August 28 – Foundations of Information Systems   Foundation concepts: Information systems   Managerial challenges of IT   O'Brien - Marakas, Chapter 1, Section I   <table><tr><td>Real World Case: Sew What? Inc. (p. 5)</td></tr><tr><td>Presenting Student's Name: Presenting Student's NetID:</td></tr></table>

Week 2, Tuesday, September 2 – Foundations of Information Systems

  Foundation concepts: The components of information systems
  Information system activities
  O'Brien - Marakas, Chapter 1, Section II

Real World Case:
Autosystems (p. 26)
Presenting Student's Name:
Presenting Student's NetID:

Or

Real World Case:
Heidelberg, Honeywell, and Eaton (p. 39)
Presenting Student's Name:
Presenting Student's NetID:

Week 2, Thursday, September 4 – Competing with Information Technology

  Fundamentals of strategic advantage
  Competitive strategy concepts
  O'Brien - Marakas, Chapter 2, Section I

Real World Case:
FedEx Corporation (p. 43)
Presenting Student's Name:
Presenting Student's NetID:

Week 3, Tuesday, September 9 – Competing with Information Technology

  Using IT for strategic advantage
  Strategic uses of IT
  O'Brien - Marakas, Chapter 2, Section II

Real World Case:
GE Energy and GE Healthcare (p. 54)
Presenting Student's Name:
Presenting Student's NetID:

Or

Real World Case:
GE, Dell, Intel, GM, and Others (p. 66)
Presenting Student's Name:
Presenting Student's NetID:

Module II: Information Technologies

Week 3, Thursday, September 11 – Computer Hardware

        Computer systems: End user and enterprise computing
        A brief history of computer hardware
        O'Brien - Marakas, Chapter 3, Section I

Real World Case: Northrup Grumman, Boeing, and Others (p. 71)
Presenting Student's Name: Presenting Student's NetID:

Week 4, Tuesday, September 16 – Computer Hardware

        Computer peripherals: Input, output, and storage technologies
        Storage trade-offs
        O'Brien - Marakas, Chapter 3, Section II

Real World Case: Apple Inc. (p. 87)
Presenting Student's Name: Presenting Student's NetID:

Or

Real World Case: E-Trade, Verizon Communications, AAA, and Others (p. 111)
Presenting Student's Name: Presenting Student's NetID:

Week 4, Thursday, September 18 – Computer Software

        Application software: End-user applications
        Software suites and integrated packages
        O'Brien - Marakas, Chapter 4, Section I

Real World Case: Wolf Peak International (p. 115)
Presenting Student's Name: Presenting Student's NetID:

Week 5, Tuesday, September 23 – Computer Software

        System software: Computer system management
        Operating systems
        O'Brien - Marakas, Chapter 4, Section II

| Real World Case: |
| Google, Microsoft, and Others (p. 130) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Or

| Real World Case: |
| Microsoft and Others (p. 151) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Week 5, Thursday, September 25 – Date Resource Management
        Technical foundations of database management
        Fundamental data concepts
        O'Brien - Marakas, Chapter 5, Section I

| Real World Case: |
| Amazon, eBay, and Google (p. 155) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Week 6, Tuesday, September 30 – No Class

Week 6, Thursday, October 2 – Date Resource Management
        Managing data resources
        Data warehouses and data mining
        O'Brien - Marakas, Chapter 5, Section II

| Real World Case: |
| Emerson and Sanofi (p. 169) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Or

| Real World Case: |
| Acxiom Corporation (p. 187) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Week 7, Tuesday, October 7 – Telecommunications and Networks
        The networked enterprise
        The role of intranets and extranets
        O'Brien - Marakas, Chapter 6, Section I

Real World Case:
Best Buy, MedStar Health, and Unifi (p. 191)
Presenting Student's Name:
Presenting Student's NetID:

Week 7, Thursday, October 9 – No Class

Week 8, Tuesday, October 14 – Telecommunications and Networks
Telecommunications network alternatives
Network architectures and protocols
O'Brien - Marakas, Chapter 6, Section II

Real World Case:
Metric & Multistandard Components Corp. (p. 207)
Presenting Student's Name:
Presenting Student's NetID:

Or

Real World Case:
SAIC, Hewlett-Packard, GE, and Others (p. 236)
Presenting Student's Name:
Presenting Student's NetID:

Week 8, Thursday, October 16 – Midterm Exam
1:15pm - 2:35pm
Same time in the same class room

Module III: Organizational Applications

Week 9, Tuesday, October 21 – Electronic Business Systems
Enterprise business systems
Benefits and challenges of CRM, ERP, and SCM
O'Brien - Marakas, Chapter 7, Section I

Real World Case:
Forex Capital Markets and Wyse Technology (p. 241)
Presenting Student's Name:
Presenting Student's NetID:

Week 9, Thursday, October 23 – Electronic Business Systems

       Functional business systems
       Marketing systems
       O'Brien - Marakas, Chapter 7, Section II

Real World Case:
Yahoo, Google, and Chrysler (p. 267)
Presenting Student's Name:
Presenting Student's NetID:

Or

Real World Case:
Tesco (p. 285)
Presenting Student's Name:
Presenting Student's NetID:

Week 10, Tuesday, October 28 – Electronic Commerce Systems

       Electronic commerce fundamentals
       Essential e-commerce processes
       O'Brien - Marakas, Chapter 8, Section I

Real World Case:
eBay versus Google and Microsoft (p. 289)
Presenting Student's Name:
Presenting Student's NetID:

Week 10, Thursday, October 30 – Electronic Commerce Systems

       Electronic commerce applications and issues
       Business-to-consumer e-commerce
       O'Brien - Marakas, Chapter 8, Section II

Real World Case:
Entellium, Digg, Peerflix, Zappos, and Jigsaw (p. 301)
Presenting Student's Name:
Presenting Student's NetID:

Or

Real World Case:
Yahoo and Flickr (p. 321)
Presenting Student's Name:
Presenting Student's NetID:

Week 11, Tuesday, November 4 – Decision Support Systems
Decision support
Knowledge management systems
O'Brien - Marakas, Chapter 9, Section I

| Real World Case: |
| Oracle Corporation and Others (p. 325) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Week 11, Thursday, November 6 – Decision Support Systems
Artificial intelligence technologies
Neural networks and genetic algorithms
O'Brien - Marakas, Chapter 9, Section II

| Real World Case: |
| Harrah's Entertainment, Lending Tree, DeepGreen Financial, and Cisco Systems (p. 349) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Or

| Real World Case: |
| IBM, Linden Labs, and Others (p. 370) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

| **Module IV: Development Processes** |

Week 12, Tuesday, November 11 – Developing Business/IT Solutions
Developing business systems
Systems analysis and design and object-oriented approaches
O'Brien - Marakas, Chapter 10, Section I

| Real World Case: |
| Intuit Inc. (p. 375) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Week 12, Thursday, November 13 – Developing Business/IT Solutions
Implementing business systems
Project management and change management
O'Brien - Marakas, Chapter 10, Section II

| Real World Case: |
| Infosys Technologies (p. 394) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Or

| Real World Case: |
| Indiana University (p. 416) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

| **Module V: Management Challenges** |

Week 13, Tuesday, November 18 – Security and Ethical Challenges
        Security, ethical, and societal challenges of IT
        Computer crime
        O'Brien - Marakas, Chapter 11, Section I

| Real World Case: |
| Cyberscams (p. 421) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Week 13, Thursday, November 20 – Security and Ethical Challenges
        Security management of IT
        Internetworked security defenses
        O'Brien - Marakas, Chapter 11, Section II

| Real World Case: |
| Lowe's, TCI, Bank of America, ChoicePoint, and Others (p. 191) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Or

| Real World Case: |
| Western Corporate Federal Credit Union and Others (p. 463) |
| Presenting Student's Name: |
| Presenting Student's NetID: |

Week 14, Tuesday, November 25 – Enterprise and Global Management of Information Technology
        Managing IT
        IT planning and organizing
        O'Brien - Marakas, Chapter 12, Section I

Real World Case: Hewlett-Packard (p. 467)
Presenting Student's Name: Presenting Student's NetID:

Week 14, Thursday, November 27 – No Class

Week 15, Tuesday, December 2 – Enterprise and Global Management of Information Technology

    Managing global IT
    Global IT platforms
    Cultural, political, and geoeconomic challenges
    O'Brien - Marakas, Chapter 12, Section II

Real World Case: IBM Corporation (p. 482)
Presenting Student's Name: Presenting Student's NetID:

Or

Real World Case: Northwestern Mutual Life, GE, and Boeing (p. 499)
Presenting Student's Name: Presenting Student's NetID:

Week 15, Thursday, December 4 – Additional Case Presentations

Week 16, Tuesday, December 9 – No Class

Week 16, Friday, December 12 – Final Exam

    10:30am - 12:30pm
    Different time but in the same class room
    (http://www.albany.edu/catalogs_calendars_schedules/final_exam_schedule_fall_2008.htm)

V. Student Evaluation and Grading

Evaluation is based upon the following weightings:

- Class Attendance: Frequency and quality of contributions to class discussions and learning environment (15%)

- Case Presentation: Digital media presentation (Microsoft-PowerPoint) based on a Real World Case associated with the weekly topic in the textbook (25%)

- Midterm exam (30%)

- Final exam (30%)

Case Presentation

1. Every week, one Real World Case associated with the weekly topic in the textbook is to be studied, introduced, and presented to the class by one student for **at least 20 minutes**.

2. Each presenter will be required to produce a digital media presentation (use Microsoft-PowerPoint to produce **at least 10 slides**) based on her/his case study observations.

3. Students will be responsible for bringing her/his PowerPoint file to the class, testing the file in advance as early as possible, and ensure that it is **valid and readable** to the Podium PC in the classroom.

4. You should **illustrate** how prominent organizations in the case have attempted to implement **the theoretical concepts** associated with the weekly topic in the textbook.

5. Use **case study questions** and **real world activities** in the textbook to help you focus on critical thinking and generate your observations on the case.

The quality of presentation will be evaluated by your colleagues immediately in the class, based on the following grading sheet. **Use this sheet to help you prepare** your presentation.

A grading sheet will be given to, and to be filled out by, **every student** except the presenter.

If you did not fill out a grading sheet for the presenter, your class attendance point would be deducted.

If a student is absent on her/his presentation date, all points for that presentation will be lost. It will not be possible to make up the presentation.

Case Name: Presenter's Name: Presentation Rubric	Scale Excellent (5); Very Good (4); Good (3); Fair (2); Not Good (1);
Organization: Student presents information in logical, interesting sequence which audience can follow.	(Out of 5)
Subject Knowledge: Student demonstrates full knowledge (more than required) by explanation, elaboration, and/or answering questions.	(Out of 5)
Graphics: Student's graphics explain and reinforce screen text and presentation.	(Out of 5)
Mechanics: Student maintains eye contact with audience, seldom returning to notes.	(Out of 5)
Lessons Learned: Informed aspects based on case study questions and real world activities. May reflect upon the content, surprises, arguments, similarities, and/or differences of the reference pieces you further gathered.	(Out of 5)
Grade in Total (Out of 25):	
Grader's Name: Grader's NetID:	

Midterm and Final Exams

There will be a mid-term examination and final examination. No make-up exams will be offered.

Class Attendance

Attendance is taken each week.

Classes will start promptly at 1:15 p.m. Students are expected to attend every class and to fully participate in all class activities.

For an unexcused absence, points will be deducted from the total grade. For an excused absence, you need to ask instructor for approval in advance or you need a letter from the Dean of Graduate Studies to explain about your absence.

Students are responsible for all assignments and work done in the class that is missed. Whenever students are late to class, points will be deducted from the total grade.

Participation

Participation in this class is important. Readings should be done in a timely manner in order to participate in the class. Students are encouraged to participate in discussion during the class.

During class discussions, student presentations, and in online environments always be respectful to everyone; listen carefully to other view points before responding and be open to ideas that may be different from your own; reply to everyone in a thoughtful and respectful manner.

It is strongly encouraged for students to work with each other in class to build a collaborative, supportive, and productive learning environment.

Grading Scale

A	100 - 94 points
A-	93 - 90 points
B+	89 - 87 points
B	86 - 83 points
B-	82 - 80 points
C+	79 - 77 points
C	76 - 73 points
C-	72 - 70 points
D	69 - 60 points
F	59 points and below

VI. Additional Course Policies

Academic Honesty

Academic dishonesty, plagiarism, and cheating will be reported to the Office of Judicial Affairs according to the policies set forth in the current University at Albany Undergraduate Bulletin or University at Albany Graduate Bulletin, whichever is applicable to the student. The instructor abides by and enforces all relevant University at Albany policies.
(http://www.albany.edu/graduatebulletin/requirements_degree.htm)
(http://www.albany.edu/undergraduate_bulletin/regulations.html)
(http://www.albany.edu/cci/informationstudies/forms/admin_forms/Academic_Dishonesty.pdf)

Disability Statement

Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of Disabled Student Services (Campus Center 137, 442-5490). That office will provide the course instructor with verification of

your disability, and will recommend appropriate accommodations.
(http://www.albany.edu/disability/DSS/guidelines/accomodation.html)

Note on the LISTSERV System

The tentative course outline and other information on the syllabus are subject to change.

Any changes will be announced either in the class or through LISTSERV announcements and updates.

Subscribe to the LISTSERV system (IIST424_F08) from your university email address. Students are responsible for being attentive to all LISTSERV announcements and updates.

To subscribe to the LISTSERV system (IIST424_F08), follow these instructions:

1. Send an email message to: listserv@listserv.albany.edu.

2. Leave the subject line blank.

3. On the first line of this email message, type the following message:

    subscribe IIST424-F08 your name

    Be sure to type your first and last name where the direction above indicates "your name."
    e.g., subscribe IIST424-F08 John Doe

4. The automated LISTSERV system will send you a message asking you to confirm your subscription to the LISTSERV system. You will be able to click on a link to confirm your subscription.

5. Once you are officially subscribed to the LISTSERV system you will receive a Welcome message from the LISTSERV system.
    (http://www.albany.edu/its/quickstarts/qs-listserv.html)