# A Teaching Portfolio For

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# Teaching Philosophy

# `Jon (Sean) Jasperson

Teaching Philosophy

My philosophy of teaching is to provide a classroom environment where students are encouraged to express their own ideas and participate in their education experience. Although I stress individual responsibility for learning in the class, I also provide explanation and guidance regarding the course materials and subject matter. I want my students to enjoy the interaction in my classroom and to be challenged by the intellectual discussion of course material.

The purpose of this document is to illustrate my philosophy of teaching. At the end of each class that I teach, I would like to have my students remember the following about me as an instructor:

1. He cared about me as a person and valued my contributions to class discussions.
2. He created an environment in the classroom which inspired learning and encouraged individual responsibility for education.

I use these statements as the guide for my performance in the classroom and to define my teaching philosophy. In the remainder of this essay, I provide examples of how I apply these guides in my teaching.

**Recognition of Individuality**

The diverse backgrounds of my students enable them to bring to my classroom a variety of ideas relating to the class material. I want my students to feel that my classroom is a discussion room where they can share their ideas about the subject matter and contribute to the educational experience. On the first day of class, I ask each student to fill out an individual information sheet. I use this information to learn about my students. Throughout the semester, I attempt to call on each student by name and to know a little about his or her background. When I know my students, they feel valued and enjoy the experience of participating in my class.

**Learning Environment**

As an instructor, I have the responsibility to help my students learn how to learn. I hope to inspire my students with a desire to learn more on their own. I encourage students to take advantage of resources other than standard course materials and lectures. For example, I assign projects which require interaction with the World Wide Web, electronic mail, and other Internet related resources. By doing so, I hope to show my students the tremendous availability of resources to use in learning about almost any subject matter they are studying.

I expect students to take individual responsibility for their education by coming prepared to participate in class. To encourage student participation, I use active learning techniques to draw individuals into class discussions. During class meetings, I ask students questions and use their responses as a foundation for the concepts to be covered in the class period. In addition, I attempt to redirect questions posed by students in the class to other students. By using active learning techniques, I hope to help my students understand they are responsible for their own education experience.

# Courses Taught

# `Jon (Sean) Jasperson

Courses Taught

The following represents a complete list of the courses I have taught during my career as a teacher. I have included a brief description of each course. Example syllabi for each course and an example project can be found in my electronic teaching portfolio available at the following URL: http://faculty-staff.ou.edu/J/Jon.L.Jasperson-1/TeachingPortfolio.html

In addition to a description of each course, I have provided a summary of the student evaluations of my performance as an instructor in the course.

## UNIVERSITY OF OKLAHOMA COURSES

### Accounting Information Systems

In this course, students learn the basics of accounting information systems. The content of the course covers the following broad areas: conceptual foundations of accounting information systems; control and audit of accounting information systems; accounting information systems applications; and the systems development process. Specific course objectives are to assist students in:

- Acquiring a conceptual understanding of the roles of accounting information and information technology in decision making, operational support, and stewardship
- Developing an in-depth awareness of the impact of accounting information systems on managerial decision making as well as organizational competitiveness
- Understanding the basic principles underlying the design, integrity, and effectiveness of accounting information systems
- Gaining an appreciation that the functions (and implementations) of accounting information systems will continue to be subject to constant rethinking caused by economic and technological change

This course is a required core course in the undergraduate Accounting program at The University of Oklahoma. I will teach this course in the Fall 2004 and Spring 2005 semesters.

### Information Systems Infrastructure

In this course students examine information systems infrastructure concepts and technologies within the context of the business enterprise. The content of the course is divided into five sections: 1) overview and introduction, 2) computer organization and architecture, 3) operations and communication, 4) networking, and 5) management issues. Specifically, the course assists students in:

- Understanding the fundamentals of hardware and software
- Identifying basic issues and trends in developing effective enterprise architectures
- Defining and understanding IS infrastructure concepts in the context of the enterprise
- Reading trade literature and utilizing related online resources
- Communicating with technology specialists and business specialists about technology
- Understanding and demonstrating professional business behavior while producing deliverables in accordance with professional-level standards

This course is a core course in the undergraduate MIS program at The University of Oklahoma. I taught this course in the Fall 2003 and Spring 2004 semesters.

Table 1 contains a summary of the student evaluations I received during the semesters that I taught this course. The instrument used by the Price College of Business during the semesters I taught this course contained 11 items. The first 9 items are rated on a 5-point Likert scale (5 = strongly agree to 1 = strongly disagree). The last two items are rated on a 5-point Likert scale (5 = excellent to 1 = bad). In the table, I have listed the mean response for each item.

**Systems Analysis and Design Theory**

This course covers the systems development lifecycle from the birth of a new system to the system's death and replacement. Students learn about various tools, techniques, and methodologies used by systems analysts to develop information systems in organizations. Specifically, the course assists the student in:

- Understanding the systems development lifecycle
- Understanding and explaining the role of information systems in organizations
- Analyzing an existing information system (whether manual or automated)
- Generating alternative solutions to an information systems problem
- Working successfully with a team of peers on a common problem

This course is a core course in the undergraduate MIS program at The University of Oklahoma. I taught this course every Fall and Spring semester between Fall 1998 and Fall 2002.

Table 2 and Table 3 contain a summary of the student evaluations I received during the semesters that I taught this course. The instrument used by the Price College of Business during the semesters I taught this course contained 40 items. Appendix 1 contains a complete listing of the 40 items.

The first 36 items are rated on a 6-point Likert scale (6 = strongly agree to 1 = strongly disagree). These items were used to evaluate general performance in the course. The results of these items are aggregated by the college into 12 groups as reported in the tables. I include the mean response for each group in the tables.

The last 4 items are rated on a 5-point Likert scale (5 = excellent, 4 = good, 3 = fair, 2 = not good, 1 = totally inadequate). These 4 items ask the student to compare the instructor and the course to 1) all other business instructors and courses and 2) all other college level instructors and courses. In the tables, I report the mean response for each of the four items.

**Object-Oriented Systems Development**

As an advanced systems analysis and design course, this course builds upon the concepts studied in the database course and the systems analysis/design theory course. However, in contrast to the structured development lifecycle studied in these previous courses, this course focuses on the concepts and principles of object-oriented systems development.

A portion of this course is devoted to learning the Unified Modeling Language (UML). Students learn how to apply the UML concepts in modeling information about the static structure and dynamic behavior of a computer-based information system. Specifically, the course assists the student in:

- Understanding the difference between structured systems development and object oriented systems development
- Applying common modeling techniques of the UML to represent the specifications of an information system
- Understanding the impact of object orientation and component-based development on the systems development field

Dr. Traci Carte and I developed this course this course together. It is an elective course in the MIS program at The University of Oklahoma. After the Fall 2000 semester, the course was slash-listed and offered to both undergraduate and graduate students. Traci Carte and I team-taught this course every Fall and Spring semester between Fall 2000 and Spring 2002. I taught this course by myself during the Fall 2002 semester.

Table 4 contains a summary of the student evaluations from the undergraduate students who took this course. Table 5 contains a summary of the student evaluations from the graduate students who took this course. The instrument used by the Price College of Business during the semesters we taught this course contained 40 items. Appendix 1 contains a complete listing of the 40 items.

The first 36 items are rated on a 6-point Likert scale (6 = strongly agree to 1 = strongly disagree). These items were used to evaluate general performance in the course. The results of these items are aggregated by the college into 12 groups as reported in the tables. I include the mean response for each group in the tables.

The last 4 items are rated on a 5-point Likert scale (5 = excellent, 4 = good, 3 = fair, 2 = not good, 1 = totally inadequate). These 4 items ask the student to compare the instructor and the course to 1) all other business instructors and courses and 2) all other college level instructors and courses. In the tables, I report the mean response for each of the four items.

## FLORIDA STATE UNIVERSITY COURSES

### Decision Support and Expert Systems Management

The objectives of this course are for students to develop an understanding of the role of computers in direct support of managerial decision making; to reinforce previous understanding of the role of managerial decision making in organizations; and to apply this understanding, as well as prerequisite systems design, database, and programming skills, to the design of typical systems for managerial decision support. Specifically, the course assists each student in:

- Understanding the concepts of decision support and expert systems structure and the principles of their design.
- Analyzing typical decision situations to determine whether it is practical to support them with computer technology and, if so, how.
- Designing and implementing a decision support system.
- Designing and implementing an expert system.

- Understanding decision support, expert, and group decision support system use, development, and evolution.
- Gaining an appreciation of working on systems development projects in a team environment and obtaining experience with project management.

This course is the capstone course in the MIS undergraduate program at Florida State University. Only senior MIS majors are allowed to take this course in the last semester before graduation. I taught this course during Fall 1996, Summer 1997, and Summer 1998 semesters.

Table 6 contains a summary of the student evaluations I received during the semesters that I taught this course. The instrument used by the College of Business during the semesters I taught this course contained 8 items. The items are rated on a 5-point Likert scale (5 = excellent, 4 = very good, 3 = good, 2 = fair, 1 = poor). As per the college evaluation system, I report the median response for each item.

**Introduction to COBOL Programming for Business**

This course provides a basic introduction to COBOL programming for business applications. Structured programming techniques and common structured programming documentation are emphasized. This course assists students in:

- Understanding the COBOL language
- Understanding structured programming techniques
- Designing and developing small-scale business applications using structured programming techniques and the COBOL language

This course is the second of three programming languages required for undergraduate MIS students at The Florida State University. I taught this course during the Spring 1998 semester.

Table 7 contains a summary of the student evaluations I received during the semester that I taught this course. The instrument used by the College of Business during the semesters I taught this course contained 8 items. The items are rated on a 5-point Likert scale (5 = excellent, 4 = very good, 3 = good, 2 = fair, 1 = poor). As per the college evaluation system, I report the median response for each item.

**Information Resource Management for Business**

This course exposes students to examples of how IT can be used in a business setting. Specifically, this course covers some ways the various functional areas of business, including accounting, marketing, finance, operations, and other areas benefit from the use of IT. Students are exposed to a variety of tools, including spreadsheet analysis and online database reference systems. Information systems concepts and principles used by organizations to help reduce costs, improve quality, and obtain a competitive advantage in the market place are integrated throughout the course. This course assists the student in:

- Understanding the role of IT in supporting business functions
- Using several systems tools, including Microsoft Windows, Lotus 1-2-3, and others
- Understanding information systems concepts and principles
- Understanding the difference between transaction processing systems, management information systems, decision support systems, and expert systems

- Understanding and applying basic systems development approaches in designing, developing, operating, and maintaining computer-based information systems

All business majors are required to take this course. I taught this course during Summer 1995 and Spring 1996 semesters.

Table 8 contains a summary of the student evaluations I received during the semesters I taught this course. The College of Business changed forms between semesters that I taught this course. A brief description of the scales are provided in the table.

**Quantitative Methods for Business**

The major objectives of this course are for students to develop an understanding of the decision making process and its application to business problems generally, and to appreciate the role of analytical methods and computer technology in finding solutions to business decision problems. Specifically, this course assists the student in:

- Understanding the nature, structure, and characteristics of various formulations of common business decision problems
- Applying various models and techniques to analyze business decision problems and alternative solutions to these decision problems
- Interpreting the results of the analysis and choosing the best solution(s) to these decision problems
- Using computer-based models and techniques to formulate and solve various common business decision problems

In this course, students are instructed in one- and two- sample hypothesis testing, chi-square hypothesis testing, regression, multiple regression, and time-series analysis techniques and how to apply these techniques to common business problems. In addition, various Bayesian and non-Bayesian decision analysis methods are explored, such as, Maximin, Maximax, Minimax Regret, Expected Payoff, and Expected Opportunity Loss.

All business majors are required to take this course. I taught this course during the Fall 1996, Spring 1997, Summer 1997, Fall 1997, and Spring 1998 semesters.

Table 9 contains a summary of the student evaluations I received during the semesters that I taught this course. The instrument used by the College of Business during the semesters I taught this course contained 8 items. The items are rated on a 5-point Likert scale (5 = excellent, 4 = very good, 3 = good, 2 = fair, 1 = poor). As per the college evaluation system, I report the median response for each item.

**Table 1** -- Summary of Student Evaluations for Information Systems Infrastructure

| | 1 | 2 | 3 | 4 | |
|---|---|---|---|---|---|
| Semester (F = Fall and S = Spring) | F2003 | F2003 | S2004 | S2004 | |
| New Prep? | Yes | Yes | No | No | |
| Number enrolled | 26 | 9 | 18 | 15 | |
| Number responding | 19 | 6 | 16 | 14 | |
| **Question** | | | | | **Mean** |
| 1. The course was well organized. | 4.04 | 4.04 | 4.62 | 4.36 | 4.27 |
| 2. The teacher made good use of examples and illustrations. | 4.03 | 4.03 | 4.50 | 4.14 | 4.18 |
| 3. The teacher stimulated class participation. | 3.86 | 3.86 | 4.52 | 4.07 | 4.10 |
| 4. The teacher encouraged questions and answered them effectively. | 3.96 | 3.96 | 4.44 | 4.28 | 4.16 |
| 5. The pace of instruction was consistent with the difficulty of the subject. | 3.82 | 3.82 | 4.25 | 4.07 | 3.99 |
| 6. The teacher was available and helpful. | 3.99 | 3.99 | 4.37 | 4.14 | 4.12 |
| 7. The teacher gave useful and timely feedback on the results of assignments and exams. | 3.98 | 3.98 | 4.56 | 4.21 | 4.18 |
| 8. The teacher was enthusiastic about teaching this course. | 4.19 | 4.19 | 4.56 | 4.28 | 4.31 |
| 9. The teacher maintained a professional attitude and treated each student with respect. | 4.27 | 4.27 | 4.62 | 4.36 | 4.68 |
| 10. How do you rate this instructor overall? | 4.04 | 4.04 | 4.69 | 4.28 | 4.26 |
| 11. How do you rate this course overall? | 3.72 | 3.72 | 4.37 | 3.86 | 3.92 |

**Scale**

Items 1 - 9 (5 = strongly agree; 4 = agree; 3 = neutral; 2 = disagree; 1 = strongly disagree)

Items 10 - 11 (5 = excellent; 4 = good; 3 = average; 2 = poor; 1 = bad)

**Table 2** -- Summary of Student Evaluations for Systems Analysis and Design Theory

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Semester (F = Fall and S = Spring) | F1998 | F1998 | S1999 | S1999 | F1999 | F1999 | S2000 | S2000 |
| New Prep? | Yes | Yes | No | No | No | No | No | No |
| Number enrolled | 39 | 45 | 16 | 32 | 33 | 37 | 37 | 32 |
| Number responding | 32 | 36 | 13 | 28 | 29 | 29 | 30 | 29 |
| **Group** | | | | | | | | |
| 1. Communication ability (3 items) | 5.06 | 5.13 | 4.41 | 4.86 | 5.05 | 4.68 | 5.28 | 5.31 |
| 2. Ability to present material (3 items) | 4.86 | 4.94 | 3.92 | 4.51 | 4.55 | 4.29 | 5.10 | 5.36 |
| 3. Instructor relationship with students (3 items) | 4.92 | 5.27 | 4.21 | 4.92 | 4.67 | 4.55 | 5.04 | 5.36 |
| 4. Instructor acceptance of criticism (2 items) | 4.86 | 5.03 | 3.5 | 4.25 | 4.21 | 4.36 | 4.88 | 5.12 |
| 5. Generation of class participation (3 items) | 5.02 | 5.35 | 4.36 | 4.90 | 4.99 | 4.54 | 5.18 | 5.46 |
| 6. Ability to motivate students (3 items) | 4.86 | 5.13 | 4.10 | 4.60 | 4.78 | 4.43 | 5.18 | 5.44 |
| 7. Clarity of course objectives (2 items) | 4.66 | 4.85 | 4.00 | 4.55 | 4.69 | 4.48 | 5.22 | 5.36 |
| 8. Evaluation of exams (3 items) | 4.26 | 4.65 | 4.28 | 4.37 | 4.28 | 4.11 | 4.68 | 4.94 |
| 9. Evaluation of assignments (3 items) | 4.77 | 5.08 | 3.64 | 4.51 | 4.84 | 4.33 | 5.16 | 5.34 |
| 10. Evaluation of text and readings (3 items) | 4.72 | 4.67 | 3.85 | 4.44 | 4.49 | 4.36 | 4.96 | 4.71 |
| 11. Evaluation of grading (5 items) | 4.69 | 4.82 | 4.23 | 4.41 | 4.39 | 4.00 | 4.99 | 4.93 |
| 12. Course organization (3 items) | 4.59 | 4.45 | 4.59 | 4.93 | 5.11 | 4.77 | 5.22 | 5.37 |
| *Overall weighted mean (12 groups)* | 4.77 | 4.95 | 4.09 | 4.60 | 4.67 | 4.41 | 5.07 | 5.23 |
| **Question** | | | | | | | | |
| 1. Instructor compared to other business instructors | 3.75 | 4.11 | 3.00 | 3.50 | 3.83 | 3.45 | 4.20 | 4.62 |
| 2. Instructor compared to all college-level instructors | 3.75 | 4.00 | 3.00 | 3.68 | 3.86 | 3.38 | 4.20 | 4.52 |
| 3. Course compared to other business courses | 3.88 | 3.89 | 3.46 | 3.86 | 4.10 | 3.90 | 4.33 | 4.48 |
| 4. Course compared to all college-level courses | 3.78 | 3.81 | 3.38 | 3.79 | 4.03 | 3.62 | 4.23 | 4.41 |

**Scale**

Groups 1 - 12 (6 = strongly agree; 5 = agree; 4 = mildly agree; 3 = mildly disagree; 2 = disagree; 1 = strongly disagree)

Items 1 - 4 (5 = excellent; 4 = good; 3 = fair; 2 = not good; 1 = totally inadequate)

**Table 3** -- Summary of Student Evaluations for Systems Analysis and Design Theory (cont.)

| | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
|---|---|---|---|---|---|---|---|---|---|
| Semester (F = Fall and S = Spring) | F2000 | S2001 | S2001 | F2001 | S2002 | S2002S | F2002 | F2002 | |
| New Prep? | No | No | No | No | No | No | No | No | |
| Number enrolled | 30 | 25 | 32 | 29 | 13 | 27 | 33 | 35 | |
| Number responding | 26 | 22 | 25 | 23 | 9 | 23 | 27 | 23 | |
| **Group** | | | | | | | | | **Mean** |
| 1. Communication ability (3 items) | 5.18 | 5.20 | 5.21 | 5.09 | 5.30 | 5.33 | 5.46 | 5.26 | 5.11 |
| 2. Ability to present material (3 items) | 5.12 | 5.11 | 5.13 | 4.94 | 5.22 | 5.20 | 5.28 | 5.09 | 4.91 |
| 3. Instructor relationship with students (3 items) | 5.35 | 5.12 | 5.05 | 5.15 | 5.11 | 5.36 | 5.25 | 5.23 | 5.04 |
| 4. Instructor acceptance of criticism (2 items) | 5.02 | 4.70 | 4.58 | 4.85 | 5.11 | 5.00 | 5.19 | 5.00 | 4.73 |
| 5. Generation of class participation (3 items) | 5.36 | 5.27 | 5.12 | 5.14 | 5.26 | 5.49 | 5.21 | 5.06 | 5.11 |
| 6. Ability to motivate students (3 items) | 5.03 | 5.23 | 5.15 | 5.09 | 5.26 | 5.38 | 5.17 | 5.13 | 5.00 |
| 7. Clarity of course objectives (2 items) | 5.19 | 5.14 | 4.98 | 5.09 | 4.78 | 5.24 | 5.24 | 5.07 | 4.91 |
| 8. Evaluation of exams (3 items) | 4.63 | 4.41 | 4.60 | 4.39 | 4.52 | 4.74 | 4.91 | 4.57 | 4.52 |
| 9. Evaluation of assignments (3 items) | 5.14 | 5.09 | 5.25 | 5.06 | 4.89 | 5.09 | 5.23 | 5.06 | 4.91 |
| 10. Evaluation of text and readings (3 items) | 4.48 | 4.49 | 4.80 | 4.29 | 4.75 | 4.58 | 5.04 | 4.78 | 4.59 |
| 11. Evaluation of grading (5 items) | 4.85 | 4.75 | 4.81 | 4.78 | 4.78 | 4.90 | 5.17 | 4.87 | 4.71 |
| 12. Course organization (3 items) | 5.09 | 5.06 | 5.07 | 4.90 | 5.00 | 5.33 | 5.40 | 5.14 | 5.00 |
| *Overall weighted mean (12 groups)* | 5.04 | 4.96 | 4.98 | 4.90 | 5.00 | 5.14 | 5.21 | 5.02 | 4.88 |
| **Question** | | | | | | | | | |
| 1. Instructor compared to other business instructors | 4.15 | 4.36 | 4.16 | 4.22 | 4.22 | 4.43 | 4.26 | 4.17 | 4.03 |
| 2. Instructor compared to all college-level instructors | 4.00 | 4.36 | 4.08 | 4.00 | 4.33 | 4.30 | 4.22 | 4.09 | 3.99 |
| 3. Course compared to other business courses | 4.00 | 4.32 | 4.32 | 3.87 | 4.44 | 4.57 | 4.11 | 4.04 | 4.10 |
| 4. Course compared to all college-level courses | 3.96 | 4.32 | 4.16 | 3.65 | 4.33 | 4.48 | 4.19 | 4.09 | 4.01 |

**Scale**

Groups 1 - 12 (6 = strongly agree; 5 = agree; 4 = mildly agree; 3 = mildly disagree; 2 = disagree; 1 = strongly disagree)

Items 1 - 4 (5 = excellent; 4 = good; 3 = fair; 2 = not good; 1 = totally inadequate)

**Table 4** -- Summary of Undergraduate Student Evaluations for Object-Oriented Systems Development

| | 1 | 2 | 3 | 4 | 5 | |
|---|---|---|---|---|---|---|
| Semester (F = Fall and S = Spring) | F2000 | S2001 | F2001 | S2002 | F2002 | |
| New Prep? | Yes | No | No | No | Yes† | |
| Number enrolled | 21 | 14 | 5 | 16 | 10 | |
| Number responding | 13 | 9 | 5 | 12 | 8 | |
| **Group** | | | | | | **Mean** |
| 1. Communication ability (3 items) | 5.33 | 5.70 | 5.33 | 5.39 | 5.29 | 5.41 |
| 2. Ability to present material (3 items) | 5.03 | 5.52 | 4.93 | 5.03 | 4.54 | 5.01 |
| 3. Instructor relationship with students (3 items) | 5.59 | 5.85 | 5.20 | 5.47 | 5.38 | 5.50 |
| 4. Instructor acceptance of criticism (2 items) | 5.38 | 5.56 | 4.90 | 5.13 | 5.06 | 5.21 |
| 5. Generation of class participation (3 items) | 5.62 | 5.81 | 5.40 | 5.61 | 5.33 | 5.55 |
| 6. Ability to motivate students (3 items) | 5.54 | 5.85 | 5.27 | 5.61 | 4.96 | 5.45 |
| 7. Clarity of course objectives (2 items) | 4.54 | 5.56 | 5.20 | 5.21 | 4.94 | 5.09 |
| 8. Evaluation of exams (3 items) | 4.67 | 5.59 | 4.87 | 5.14 | 4.83 | 5.02 |
| 9. Evaluation of assignments (3 items) | 4.59 | 5.56 | 5.07 | 5.26 | 5.29 | 5.15 |
| 10. Evaluation of text and readings (3 items) | 4.23 | 5.19 | 5.00 | 4.92 | 4.71 | 4.81 |
| 11. Evaluation of grading (5 items) | 4.60 | 5.27 | 4.96 | 5.22 | 5.20 | 5.05 |
| 12. Course organization (3 items) | 4.69 | 5.41 | 5.13 | 5.31 | 5.25 | 5.16 |
| *Overall weighted mean (12 groups)* | 4.98 | 5.57 | 5.11 | 5.27 | 5.07 | 5.20 |
| **Question** | | | | | | |
| 1. Instructor compared to other business instructors | 4.62 | 4.89 | 4.80 | 4.58 | 4.00 | 4.58 |
| 2. Instructor compared to all college-level instructors | 4.62 | 4.89 | 4.60 | 4.50 | 3.88 | 4.50 |
| 3. Course compared to other business courses | 4.31 | 4.78 | 5.0 | 4.42 | 3.88 | 4.48 |
| 4. Course compared to all college-level courses | 4.23 | 4.56 | 4.60 | 4.42 | 4.00 | 4.36 |

†New prep to teach course by myself

**Scale**

Groups 1 - 12 (6 = strongly agree; 5 = agree; 4 = mildly agree; 3 = mildly disagree; 2 = disagree; 1 = strongly disagree)
Items 1 - 4 (5 = excellent; 4 = good; 3 = fair; 2 = not good; 1 = totally inadequate)

**Table 5** -- Summary of Graduate Student Evaluations for Object-Oriented Systems Development

| | 1 | 2 | 3 | 4 | |
|---|---|---|---|---|---|
| Semester (F = Fall and S = Spring) | S2001 | F2001 | S2002 | F2002 | |
| New Prep? | Yes | No | No | Yes† | |
| Number enrolled | 4 | 8 | 7 | 13 | |
| Number responding | 4 | 8 | 7 | 6 | |
| **Question** | | | | | **Mean** |
| 1. Communication ability (3 items) | 5.42 | 5.38 | 5.43 | 5.50 | 5.43 |
| 2. Ability to present material (3 items) | 5.25 | 5.25 | 5.16 | 5.39 | 5.26 |
| 3. Instructor relationship with students (3 items) | 5.58 | 5.33 | 5.62 | 5.72 | 5.56 |
| 4. Instructor acceptance of criticism (2 items) | 4.88 | 5.00 | 5.43 | 5.58 | 5.22 |
| 5. Generation of class participation (3 items) | 5.50 | 5.38 | 5.57 | 5.61 | 5.52 |
| 6. Ability to motivate students (3 items) | 5.50 | 5.29 | 5.35 | 5.56 | 5.43 |
| 7. Clarity of course objectives (2 items) | 5.25 | 5.31 | 5.29 | 5.33 | 5.30 |
| 8. Evaluation of exams (3 items) | 5.03 | 4.88 | 4.86 | 5.22 | 5.00 |
| 9. Evaluation of assignments (3 items) | 5.58 | 5.04 | 5.19 | 5.39 | 5.30 |
| 10. Evaluation of text and readings (3 items) | 4.67 | 5.00 | 5.19 | 5.28 | 5.04 |
| 11. Evaluation of grading (5 items) | 4.55 | 4.90 | 5.11 | 5.30 | 4.97 |
| 12. Course organization (3 items) | 4.75 | 5.04 | 5.19 | 5.39 | 5.09 |
| *Overall weighted mean (12 groups)* | 5.16 | 5.15 | 5.28 | 5.44 | 5.26 |
| **Question** | | | | | |
| 1. Instructor compared to other business instructors | 4.25 | 4.25 | 4.43 | 4.67 | 4.40 |
| 2. Instructor compared to all college-level instructors | 4.25 | 4.13 | 4.29 | 4.67 | 4.34 |
| 3. Course compared to other business courses | 4.25 | 4.25 | 4.00 | 4.17 | 4.17 |
| 4. Course compared to all college-level courses | 4.25 | 4.25 | 4.00 | 4.17 | 4.17 |

†New prep to teach course by myself

**Scale**

Groups 1 - 12 (6 = strongly agree; 5 = agree; 4 = mildly agree; 3 = mildly disagree; 2 = disagree; 1 = strongly disagree)
Items 1 - 4 (5 = excellent; 4 = good; 3 = fair; 2 = not good; 1 = totally inadequate)

**Table 6** -- Summary of Student Evaluations for Decision Support and Expert Systems Management

| | 1 | 2 | 3 | |
|---|---|---|---|---|
| Semester (F = Fall; S = Spring; and Su = Summer) | F1996 | Su1997 | Su1998 | |
| New Prep? | Yes | Yes† | No | |
| Number enrolled | 24 | 48 | 53 | |
| Number responding | 16 | 20 | 42 | |
| **Question** | | | | **Mean** |
| Description of course objectives and assignments. | 4.0 | 4.0 | 4.0 | 4.0 |
| Communication of ideas. | 3.5 | 3.0 | 4.0 | 3.5 |
| Expression of expectations for performance in this class. | 3.5 | 3.0 | 4.0 | 3.5 |
| Availability to assist students in or out of class. | 4.5 | 4.0 | 4.5 | 4.3 |
| Respect and concern for students. | 4.0 | 4.0 | 5.0 | 4.3 |
| Stimulation of interest in the course. | 4.0 | 3.5 | 4.0 | 3.8 |
| Facilitation of learning. | 3.5 | 3.0 | 4.0 | 3.5 |
| Overall assessment of instructor. | 4.0 | 4.0 | 5.0 | 4.3 |

†New prep for different textbook

**Scale**
5 = excellent; 4 = very good; 3 = good; 2 = fair; 1 = poor

**Table 7** -- Summary of Student Evaluations for COBOL Programming

| | 1 |
|---|---|
| Semester (F = Fall; S = Spring; and Su = Summer) | S1998 |
| New Prep? | Yes |
| Number enrolled | 39 |
| Number responding | 28 |
| **Question** | |
| Description of course objectives and assignments. | 4.0 |
| Communication of ideas. | 4.0 |
| Expression of expectations for performance in this class. | 4.0 |
| Availability to assist students in or out of class. | 4.0 |
| Respect and concern for students. | 4.0 |
| Stimulation of interest in the course. | 4.0 |
| Facilitation of learning. | 4.0 |
| Overall assessment of instructor. | 4.0 |

**Scale**
5 = excellent; 4 = very good; 3 = good; 2 = fair; 1 = poor

**Table 8** -- Summary of Student Evaluations for Information Systems Resource Management

| |
|---|
| **Summer 1995**<br><br>Responses are on a five-point Likert scale ranging from 5 = strongly agree to 1 = strongly disagree. Thirty-two students responded to this evaluation.<br><br>Responses to four questions regarding the instructor's involvement with and concern for students had a mean of 4.31 with a standard deviation of 0.70. Responses to four questions concerning the instructor's interaction with the students had a mean of 4.46 with a standard deviation of 0.53.<br><br>81 percent of the students generally agreed that as an instructor, I was thoroughly competent in my area and 78 percent of the students generally agreed that as an instructor I was an effective teacher. |
| **Spring 1996**<br><br>The same 8 items reported in Table 6, Table 7, and Table 9 were used by the college during this semester; however, only percentage of students responding in each of the 5 scale categories are reported. Student responses are on a five-point Likert scale with categories of excellent, very good, good, fair, and poor. Thirty of the 40 enrolled students responded to this student evaluation.<br><br>At least 70 percent of the responding students placed me in the excellent or very good categories in response to each of the 8 items on the scale except item number 3, where only 66 percent of the respondents indicated that I was in these two categories. |

**Table 9** -- Summary of Student Evaluations for Quantitative Methods for Business

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
|---|---|---|---|---|---|---|---|---|
| Semester (F = Fall; S = Spring; and Su = Summer) | F1996 | S1997 | S1997 | Su1997 | F1997 | F1997 | S1998 | |
| New Prep? | Yes | No | No | No | No | No | No | |
| Number enrolled | 41 | 60 | 57 | 42 | 40 | 42 | 41 | |
| Number responding | 28 | 43 | 32 | 32 | 33 | 34 | 32 | |
| **Question** | | | | | | | | **Mean** |
| Description of course objectives and assignments. | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 5.0 | 5.0 | 4.3 |
| Communication of ideas. | 3.0 | 3.0 | 4.0 | 4.5 | 4.0 | 4.0 | 5.0 | 3.9 |
| Expression of expectations for performance in this class. | 4.0 | 3.0 | 4.0 | 4.0 | 4.0 | 5.0 | 5.0 | 4.1 |
| Availability to assist students in or out of class. | 4.5 | 4.0 | 5.0 | 5.0 | 4.0 | 4.0 | 4.0 | 4.4 |
| Respect and concern for students. | 4.0 | 4.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 4.7 |
| Stimulation of interest in the course. | 3.0 | 3.0 | 4.0 | 4.0 | 4.0 | 4.0 | 5.0 | 3.9 |
| Facilitation of learning. | 3.0 | 3.0 | 4.0 | 4.0 | 4.0 | 4.0 | 5.0 | 3.9 |
| Overall assessment of instructor. | 3.0 | 4.0 | 4.0 | 5.0 | 4.0 | 4.0 | 5.0 | 4.1 |

**Scale**
5 = excellent; 4 = very good; 3 = good; 2 = fair; 1 = poor

## Appendix 1

This appendix contains the complete set of items used on the student evaluations for the Price College of Business for all courses I taught between the Fall 1998 semester and the Fall 2002 semester. Items are presented with their respective group.

The following items were rated using a 6-point Likert scale (1 = strongly agree; 2 = agree; 3 = mildly agree; 4 = mildly disagree; 5 = disagree; 6 = strongly disagree).

**Group 1 -- Questions to assess communication ability**

1. The instructor speaks clearly when presenting material.
2. The instructor holds the attention of the class.
3. The instructor presents material at an appropriate pace.

**Group 2 -- Questions to assess ability to present material**

1. The instructor is able to simplify what is taught.
2. The instructor makes good use of examples and illustrations.
3. The instructor carefully answers questions.

**Group 3 -- Questions to assess instructor's relationship with students**

1. I have access to the instructor or his/her assistants during office hours or immediately after class.
2. The instructor establishes rapport with the class.
3. The instructor is helpful when students have problems.

**Group 4 -- Questions to assess instructor's acceptance of criticism**

1. The instructor invites criticism of his/her ideas.
2. The instructor respects divergent viewpoints.

**Group 5 -- Questions to assess generation of class participation**

1. I feel involved with this course.
2. I feel free to ask questions in class.
3. There is a lot of classroom discussion in this course.

**Group 6 -- Questions to assess ability to motivate students**

1. The instructor is enthusiastic about teaching.
2. I was stimulated to think in this class.
3. I find learning enjoyable in this class.

**Group 7 -- Questions to assess course objectives**

1. The objectives of this course are clearly communicated.
2. I understand what is expected of me in this course.

**Group 8 -- Questions to evaluate exams**

1. Exams are free from ambiguity.
2. Exams assess what I have learned in this course.
3. Exams are coordinated with major course objectives.

**Group 9 -- Questions to evaluate assignments**

1. Directions for course assignments are clear and specific.
2. Assignments are related to goals of this course.
3. Assignments are of definite educational value.

**Group 10 -- Questions to assess textbooks and readings**

1. I am generally pleased with the text(s) required for this course.
2. The assigned reading is well integrated into this course.
3. The assigned reading is generally interesting and holds my attention.

**Group 11 -- Questions to evaluate grades**

1. Grades are an accurate assessment of my knowledge in this course.
2. Grades are assigned fairly and impartially.
3. Grades are returned in a timely fashion.
4. The grading system was clearly explained.
5. The number of graded assignments and tests is acceptable.

**Group 12 -- Questions to assess course objectives**

1. The course was well organized.
2. A syllabus clearly laid out the course requirements and objectives, instructor's office hours, how grades would be determined, etc.
3. The course was well structured.

The following items were rated on a 5-point Likert scale (1 = Excellent; 2 = Good; 3 = Fair; 4 = Not Good; 5 = Totally Inadequate).

1. How does this instructor compare to other business instructors?
2. How does this instructor compare to **all** instructors you have had at the college level?
3. How does the amount of knowledge you gained in this course compare to the amount of knowledge gained in other business courses?
4. How does the amount of knowledge you gained in this course compare to the amount of knowledge gained in **all** college courses you have taken?

# Example Syllabus

**Michael F. Price College of Business**
**Division of Management Information Systems**
**MIS 3363 -- IT Infrastructure**
**Spring 2004**

| Section 1<br>12:00 - 1:15 TR<br>Classroom AH 112 | Section 4<br>1:30 - 2:45 TR<br>Classroom AH 355 |
|---|---|

**Instructor:** Dr. Jasperson
**Office:** AH, 308A
**Phone:** 325-2487
**E-Mail:** jjasperson@ou.edu
**Webpage:** http://faculty-staff.ou.edu/J/Jon.L.Jasperson-1
**Office Hours:** 4:00 - 5:00 p.m. TR and by appointment

> *"The University of Oklahoma exists for the students . . . but the university cannot give you an education -- it can only help you acquire one for yourselves. The main effort must be made by the students."*
> (Former OU President George Lynn Cross -- 1952)

## Course Overview and Objectives

According to the Merriam-Webster OnLine dictionary (http://www.m-w.com), the word "infrastructure" means 1: the underlying foundation or basic framework (as of a system or organization) 2: the permanent installations required for military purposes 3: the system of public works of a country, state, or region; *also:* the resources (as personnel, buildings, or equipment) required for an activity.

During the semester, we will see how this general definition can be applied in the context of information technology (IT). We will examine IT infrastructure concepts and technologies within the context of the business enterprise. The content of the course is divided into five sections: 1) overview & introduction, 2) computer organization & architecture, 3) operations & communication, 4) networking, and 5) management issues.

At the end of the course successful students should be able to:

- ✓ Understand the fundamentals of computing and communications hardware and software.
- ✓ Identify basic issues and trends in developing effective enterprise architectures. Be able to evaluate systems architecture and identify consequences of proposed systems changes and architectural modifications within a business context.
- ✓ Define and understand IT infrastructure concepts in the context of the business enterprise. Identify issues and trends in planning for, evaluating, and maintaining an effective IT infrastructure in relation to general business goals and strategies.
- ✓ Read trade literature and utilize related online resources. Understand the significance of articles and other resources encountered, and determine how to apply knowledge gained from these resources to business situations.

- ✓ Communicate with technology specialists. Be able to communicate system requirements and understand fundamental strengths and weaknesses of technical proposals, as they relate to IT infrastructure.
- ✓ Communicate with business specialists (including users and managers). Be able to determine and communicate system requirements in the context of the business environment. Understand fundamental strengths and weaknesses of business proposals as they relate to IT infrastructure.
- ✓ Understand and demonstrate professional business behavior and produce deliverables in accordance with professional-level standards.

**Course Materials**

REQUIRED Burd, S. D. *Systems Architecture*, (4th ed.) Course Technology, Boston, MA, 2003.
OPTIONAL White, R. *How Computers Work*, (6th ed.) Que, 2002.

Occasionally additional reading and study from outside sources may be required or recommended. These sources will include, but are not limited to, recent newspapers, business journals and monographs, and the World Wide Web. Any such reading/study assignments will be announced in class by the instructor.

**Grading and Course Requirements**

The course requirements and evaluation of each student's work in the course are based upon performance in several areas. Grade contributions and letter grade determination are shown below.

| | |
|---|---|
| Midterms (2)* | 50% |
| Team Project | 25% |
| Homework | 10% |
| Team Bowl | 5% |
| Article Summaries | 5% |
| Class Participation | 5% |
| **Total** | 100% |

| Percent | Grade |
|---|---|
| 91-100 | A |
| 81-90 | B |
| 71-80 | C |
| 61-70 | D |
| 0-60 | F |

***Please Note**: If a student's average score across the two midterm exams is less than 70%, the highest grade the student may earn for the course is a "D." This rule applies regardless of the student's performance in other areas of the course. If a student's average exam score is less than 70%, the student will earn a final grade of "D" or "F" based on the student's average exam score.

***Midterms***. There will be two midterm examinations. Each midterm exam is worth 25% of your final grade. These examinations will cover material from text readings, class discussions, guest lectures, and outside readings.

***Team Project***. The team project will give you an opportunity to apply what you have learned about IT Infrastructure to a specific business situation. There are three parts to the project: 1) researching and analyzing the business situation of a specific organization, 2) assessing general IT Infrastructure needs and solutions for the organization (based upon their business situation), and 3) expanding upon one or two of the identified IT Infrastructure needs/solutions with a technical IT Infrastructure Plan.

Details on the project will be posted on Blackboard. The project is due on April 23, 2004 at 4:25 p.m. Teams should make every effort to complete the project early. Those who wait until the last minute risk delays with the computer facilities (i.e., down time, printer jams, computer crashes, etc.) and availability of the instructor.

Work turned in late will be discounted by 25% no matter what the reason. Projects turned in more than 2 hours late will not be graded (i.e., all students on the team will receive a zero grade for the assignment). Projects are considered late if they are turned in after the specified time on the due date.

***Homework***. There will be 11 homework assignments during the semester. Homework assignments are individual assignments; therefore, the work is to be performed by the individual submitting the work for grading.

Each assignment will be worth 1 point and will be graded on a credit/no credit (i.e., 0 or 1 point) basis. To receive credit for a homework assignment it must be complete and reflect "good effort." Only 10 total points will be allocated to your homework grade. Thus, you may earn an "extra credit" point to apply to the rest of your grade by submitting all 11 homework assignments. (Alternatively, you may elect to only submit 10 homework assignments.) No late homework will be accepted.

Homework is always due at the beginning of the class period on the due date. Submitted assignments should look professional (i.e., use a word processor and staple multiple pages together).

The requirements for these assignments will be made available on the web. You will be expected to view and use the documents online or download and print the assignment from the web (see the "Electronic Course Support" section for the URL and instructions).

I do not accept homework via email. If you will miss class, email your homework to a team member and ask that s/he submit your work for you.

***Team Bowl***. Team Bowl is an exercise that combines individual testing, group testing, and teamwork in a competitive environment. The team bowl exercise will be used to test you on materials covered after exam 2, to provide you and your teammates opportunity to study and to work together as a team, and to have some fun. As an incentive, there will be a prize for the top scoring team in each section. Team bowl details will be discussed later in the semester.

***Article Summaries***. Each student will have the opportunity to summarize 5 articles during the semester. For each article summary, you will identify an IT infrastructure related article published during the semester; read and provide a written summary of the article; and present the content of the article to the class.

The objectives of this assignment are for each student to: 1) gain experience reading IT infrastructure-related periodicals, 2) gain experience condensing findings into an “executive summary” and 3) be exposed to a wider range of infrastructure-related business situations and products/services.

In-class presentations will begin on February 3. For each of the remaining days in the semester, 5 students will be selected to present 1 article summary each to the rest of the class. The article you read, summarize, and present must match the posted topic for the day from the course schedule. We will not have presentations on review days or exam days (i.e., Feb 17, Feb 19, Apr 1, Apr 6, and Apr 29).

Each student will be randomly assigned 5 class days for presenting their article summary during class on January 27.  The first few minutes of each class period will be dedicated to discussing article summaries. Additional details related to the article summaries are posted on Blackboard.

***Class Participation***. Class participation is based on participation in and contribution to in-class discussions. Students are expected to contribute to classroom discussions and activities. I will periodically give unannounced quizzes and/or in-class assignments. There are no make-ups allowed for any of these activities -- **no exception**. Your graded performance on these assignments and quizzes will be applied toward your class participation grade.

The quizzes and assignments will typically cover material from prior class discussions or from the assigned reading for the current class period. Completion of the chapter review questions and review of the key terms for each chapter are recommended as preparation for each class period.

No make-ups will be allowed for missed in-class activities. If you are not in class on the day of an in-class activity, you cannot participate in the activity and cannot receive points for the activity. There will be enough of these activities that missing one or two will not significantly impact your final grade.

## Office Hour Policy

Office hours provide an opportunity for you to obtain specific guidance and help with your understanding of the material. The purpose of office hours is for you to obtain assistance in understanding the course material. I expect you to use them as your needs demand. I tend to be unsympathetic toward individuals with grade problems at the end of the semester who have never attempted to get help via office hours.

## Electronic Course Support

I will rely extensively on electronic communication with the class. As information professionals, you should have the habit of regularly checking your e-mail. When I send e-mail message to the class, I will use the distribution list that the university has established for the course. This list will only send messages to your university account. If you use a different e-mail account, it is your responsibility to have messages forwarded from your university account to another account.

Links to the syllabus and other pertinent course information such as handouts and assignments can be found in the OU Blackboard system. You should check this website regularly to be informed of what is happening in the class. You can login to the Blackboard system at the following URL: (https://ou.blackboard.com).

**Students With Disabilities**

The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the professor as early in the semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accommodations in this course (http://www.dsa.ou.edu/ods). The Office of Disability Services is located in Goddard Health Center, Suite 166, phone 325-3852 or TDD only 325-4173.

**Religious Holidays**

It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required course work that may fall on religious holidays. Students **must** notify the instructor **in advance** of any such observances.

**Academic Conduct**

The University of Oklahoma has an Academic Misconduct Code that governs student academic performance in and out of the classroom. You can learn more about the academic misconduct code as well as your rights and responsibilities at the following URL: http://www.ou.edu/provost/pronew/content/integritymenu.html.

Academic misconduct is defined as "*any act that improperly affects the evaluation of a student's academic performance or achievement.*" All students are responsible for submitting their own work for evaluation by the instructor. The steps and procedures as outlined in the Academic Misconduct Code will be followed in all cases of academic misconduct in this class.

**Food and Drink in the Classroom**

The Price College has spent a great deal of private and state funds to provide nicely furnished classrooms and computer labs. No food or drinks will be allowed in the classroom.

**Class Policies**

- *Do not engage in disruptive behavior in the classroom*. Interfering with your fellow students' ability to learn will not be tolerated.
- *Turn assignments in when they are due.* **I will not accept late homework assignments for grading**. "Late" means any time after the assignment has been collected in class by the instructor.

- *Be prepared*. Each student is expected to come to class fully prepared to discuss the material from the assigned readings. I will expect students to have read the text before class and rely on their preparedness to drive class discussions.
- *Attend class*. If you must miss class, it is your responsibility to find out what material, homework assignments, schedule changes, etc. you missed. Do not come to my office a week later and ask, “Did I miss anything?” (Assume that I would answer “yes” to this question.)
- *Arrive on time and stay for the duration of each class.* If you must be late to or leave early from class, please let me know beforehand and be as unobtrusive as possible. It is very disruptive to have students walking in and out during class time.
- *Take exams during the scheduled time.* If, due to emergency or illness, you know you will miss a scheduled exam, it is your responsibility to let me know ahead of time. Make-up exams may be oral, essay, or another format, as determined by the instructor.

**Miscellaneous Class Notes**

***Problems***. This is a very difficult course. Let me know, as early as possible, if you have trouble with the material, assignments, project, team members, etc. Ask questions during class. Come see me during office hours. Send e-mail messages. In short, if you are doing the work and need help, get it! I cannot help you if I am not aware of the problem. If you find yourself in a team that is causing problems which you and the team cannot work out, please come see me as soon as possible.

***Privacy of grades***. Scores and grades will be posted in the Blackboard system. If you would like to have your scores and grades posted, please indicate your desire on the student information sheet. I do not discuss scores or grades over the phone or via e-mail.

***Syllabus changes***. The topics and dates as outlined in the course schedule are subject to change. All necessary changes will be announced and discussed in class. You are responsible for making sure you are aware of any such changes. However, the dates of the examinations will not change.

## Course Schedule

| I. Overview and Introduction | | | |
|---|---|---|---|
| **Date** | **Class Discussion** | **Assignment** | **Homework Due** |
| Jan 13 | Course Overview | | |
| Jan 15 | Computer Technology: Your Need to Know | SA-1 | Good Teacher Essay |
| Jan 20 | What is “IT Infrastructure”? | LS-1<br>SA-14 (p.544-546) | Homework 1 |
| Jan 22 | Intro to IT Architecture Principles | LS-2 | |
| Jan 27 | Intro to Team Project and Article Summaries | | Team Membership |
| Jan 29 | Intro to Systems Architecture | SA-2 | Homework 2 |
| **II. Computer Organization and Architecture** | | | |
| **Date** | **Class Discussion** | **Assignment** | **Homework Due** |
| Feb 3 | Data Representation | SA-3 | Homework 3 |
| Feb 5 | Processor Technology & Architecture | SA-4 | |
| Feb 10 | Data Storage Technology | SA-5 | Homework 4 |
| Feb 12 | Systems Integration & Performance | SA-6 | |
| Feb 17 | Exam Review & Discussion | Handouts 1 & 2 | Homework 5 |
| Feb 19 | **Midterm Exam 1 (Materials Covered to Date)** | | |
| **III. Operations and Communications** | | | |
| **Date** | **Class Discussion** | **Assignment** | **Homework Due** |
| Feb 24 | Software Basics, Middleware & Applications | LS-3<br>Readings 1 | Milestone 1 |
| Feb 26 | Operating Systems | SA-11 | Milestone 1 |
| Mar 2 | | | Homework 6 |
| Mar 4 | File Management Systems | SA-12 | |
| Mar 9 | Data & Network Communication Technology | SA-8 | Homework 7 |
| Mar 11 | | | |
| Mar 16 | Spring Break -- No Class | | |
| Mar 18 | Spring Break -- No Class | | |
| **IV. Networking** | | | |
| **Date** | **Class Discussion** | **Assignment** | **Homework Due** |
| Mar 23 | Computer Networks | SA-9 | Homework 8 |
| Mar 25 | The Internet, Intranets & Extranets | SA-13 (p.517-523)<br>Handout 3 | |
| Mar 30 | Internets & Distributed Application Services | SA-13<br>(p.503-516/523-540) | Milestone 2 |
| Apr 1 | Exam Review & Discussion | | Homework 9<br>Milestone 2 |
| Apr 6 | **Midterm Exam 2 (Materials Covered After Midterm Exam 1)** | | |

## V. Management Issues

| Date | Class Discussion | Assignment | Homework Due |
|---|---|---|---|
| Apr 8 | Security Issues & Solutions | LS-4<br>Readings 2 | |
| Apr 13 | | SA-14 (p.557-572) | |
| Apr 15 | Human IT Infrastructure Issues | LS-5 | Homework 10 |
| Apr 20 | Organizational Assessment & Performance Issues | LS-6<br>SA-14 (p.551-557) | |
| Apr 22 | Acquisition & Outsourcing Issues | LS-7<br>SA-14 (p.547-551) | Homework 11<br>Team Project<br>(Apr 23) |
| Apr 27 | In-Class Student Evaluations and Regulatory Issues | LS-8 | |
| Apr 29 | Team Bowl Review | | |

| | |
|---|---|
| May 6 | **Section 002 Final Exam --- 1:30 - 3:30 p.m.** |
| May 7 | **Section 001 Final Exam --- 1:30 - 3:30 p.m.** |

### Course Schedule Legend

SA = *Systems Architecture* textbook
LS = Lecture Slides posted on Blackboard

# Example Project

**Semester Project**
***MIS 3373 -- Sections 1 and 2***
Fall 2002

Due Date: Friday, December 6, 2002, 4:25 p.m.[1]
Early Bonus: Friday, November 29, 2002, 4:25 p.m. (Receive up to 10 bonus points)
Points: 200 points

## Big Horn Dental

Big Horn Dental (BHD) is a dental clinic located in Sheridan, Wyoming. The clinic, which employs five dentists, five dental technicians, four hygienists, and six office staff workers, offers a full line of dental services. BHD currently has a customer base of 5,500 patients from 1,800 different households.

BHD patients are employed by 250 different employers, many of which provide dental insurance policies for their employees. Consequently, BHD currently has to deal with 34 different insurance companies.

Emmy Roberts, the BHD office manager, recently asked for permission to hire an additional office clerk. She feels the current staff can no longer handle the growing workload. Subsequently, the members of the clinic's governing board decided to investigate the possibility of computerizing some of the clinic's office systems. Dr. Colette Early, one of the clinic's dentists who sits on the board was asked to head up a project to investigate this possibility.

Since no member of the current clinic staff is a computer expert, Dr. Early asked your consulting team to analyze their method of scheduling patients, keeping patient records, billing patients, and billing insurance companies. Although these systems currently exist as three separate manual systems, the BHD associates would like to have one automated system which allows all three systems to be integrated.

## Operations at Big Horn Dental

Until now, operations at BHD have been conducted using three separate manual information systems: the patient record system, the patient scheduling system, and the billing system. After a series of detailed interviews and observing the work of the individuals involved in the existing manual systems at BHD, your group has learned the following about each of the BHD systems.

### Patient Record System

BHD is required by the American Dental Association to maintain accurate records for each patient who receives dental care from the clinic. Based upon your interviews with Mandy Wright, the administrative assistant who oversees the maintenance of patient records, you have learned the following regarding the manual patient record system.

When a new patient comes to the clinic, the patient is required to fill out a patient information sheet. On the information sheet, the new patient provides information about himself or herself

[1] Projects may be turned in during class or hand-delivered to my office, AH 308A, anytime before 4:25 p.m. on the due date. The syllabus describes my policy regarding projects that are submitted late. In short, if a project is turned in one second after the designated time, the project is considered late and will receive a 25% point penalty (i.e., I reduce your grade by 25% of the total possible points). I will be using my watch to determine the due time.

(her/his name, address, phone number, social security number, birth date, allergies) and information about his/her insurance provider (provider name, provider number[2], provider address, provider phone). Furthermore, if the new patient is a minor or related to another patient in some way (i.e., a patient's spouse), the head of household will be indicated on the individual's information sheet. The information provided by the patient is placed in a folder and filed by patient name with the other patient records.

After a patient receives services at the clinic, the patient's record is retrieved from the file cabinet and a journal entry is added to the file to maintain a record of the services provided for the patient. In addition, information about the patient and the service received is written on a services received form and sent to Cassie Mayan, the billing clerk.

A separate record is also maintained for each of the dentists which lists the date and time each patient was seen, the patient's name, and services provided. From these lists, a weekly provider report is generated. The weekly provider report lists each dentist by name and the charges generated by the dentist on a month-to-date (MTD) and year-to-date (YTD) basis. This report is used by the governing board in planning, controlling, and evaluating the level of service provided by each member of the professional dental staff.

Periodically, patients will call the clinic to request that a copy of their dental records be sent either to the patient directly or to a different dental provider. In these cases, the patient's record is retrieved from the file cabinet, photocopied, and sent to the correct party.

**Patient Scheduling System**

The primary function of the scheduling system is to schedule appointments for dental services. Patients call BHD to indicate days when they would like to make appointments for dental services. When the receptionist receives a patient call, s/he checks the calendar for that day to see if any time slots are available. A patient may request to see a particular dentist. If so, only the schedule for that dentist is checked. When a patient does not specify which dentist, the receptionist randomly selects one of the available dentists for the appointment.

Patients often call to cancel appointments or to change appointments. A canceled appointment is erased from the calendar. If the appointment is changed, the original appointment is erased and a new appointment is entered.

Before a patient leaves the office after receiving dental services, the receptionist tentatively schedules a check-up appointment for when the patient should return for services. These appointments are scheduled for dates 6 months in advance.

Twice each month, a member of the office staff reviews the scheduling calendar for upcoming appointments and mails a postcard to remind the patient of the appointment. This review happens on or near the 1st day of the month and the 15th day of the month. At the first of the month, the staff member sends postcards for appointments between the 16th day of the month and the end of the month. In the middle of the month, the staff member sends postcards to patients with appointments between the 1st day and the 15th day of the following month. Thus, each patient receives a reminder postcard sometime between 2 and 3 weeks before his/her scheduled appointment.

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[2] The provider number is the individual's dental insurance policy number.

Two reports are created on a daily basis as part of the patient scheduling system: 1) a daily appointment list for each dentist and 2) a daily call list. The contents of these lists are described in the following paragraphs.

For each dentist, a separate daily appointment list shows all scheduled appointment times and patient names, along with the services to be performed on each patient. The services are listed by service code and an abbreviated service description. The dentist receives one copy of this report when he/she arrives at the office each morning. The receptionists use a duplicate copy of these lists as patients arrive at the front desk to check-in for an appointment.

The daily call list contains information about the patients who have appointments for the following day (on Fridays, the daily call list has the upcoming Monday appointments). Shown on the list are the patient name, telephone number, appointment time, and dentist name. Sometime during the day, the receptionists call each person on this list to remind them about their appointment.

**Billing System**

At the end of each week of operations, statements are mailed to each insurance carrier. The insurance carrier statement requests payment for services rendered to those patients insured by the carrier. The header information of the statement identifies the insurance carrier by name, address, and phone number and contains the statement date. The detail section of the statement contains two parts. The first part lists a patient's provider number, the date service was provided, the service code for the service provided, a brief description of the service provided, and the charge for the service for all services provided during the previous week. The second part lists the date, patient provider number, and amount of each payment received from the carrier for the previous week. The statement footer contains the previous week's balance due, the total charges for the week, the total payments for the week, and the new balance.

Insurance companies send payments to BHD on a regular basis. A separate payment is made for each patient that has covered services provided by BHD. A payment has the patient's name and policy number, the service code and description of service, and the amount paid. In addition, the insurance companies sometimes deny payment for a service. A denial has the patient name, patient policy number, the service code, service description, and the reason for denial.

Patient's statements are generated and mailed on a monthly basis. Header information on the patient statement contains the statement date, account number, head of household's name and address, the previous month's balance, the total household charges MTD, the total payments received MTD, and the current balance. The detail section of the report lists every account activity for the month in date order. For every service performed, there is a line showing the patient's name, the service date, the service description, and the service fee. For every adjustment and payment received, there is a line showing the date and amount. If payment is received from an insurance company, then that source is noted on the line. A running balance appears at the far right of each activity line.

Patient's also submit payments to BHD on a regular basis. When a patient makes a payment, the amount received is deducted directly from the patient's account balance. The patient provides the following payment information when a payment is made: patient's name and address, account number, and amount paid.

## Project Requirements

Use the computer tool of your choice to document the design specification deliverables listed below. Your team will be expected to deliver the following on the due date of the project:

1. **Project report**. The project report has two purposes: 1) to give an overview of the project learning experience and 2) to convey any assumptions your group makes in designing the new automated scheduling and billing system. In the overview, you should write about problems you encountered in designing the new system and how your group dealt with these problems. Problems can range from issues in interpreting parts of the case to issues of group conflict. This report should only be two or three pages in length.

2. **Context Level Diagram**. On the context level diagram, identify all the inputs and outputs relevant to the new system. All three manual systems described above will be combined into one automated system.

3. **Entity-Relationship Diagram**. Use the entity-relationship diagram to identify the things about which BHD should store information and how these entities are related to one another. Your entity relationship diagram must include the conceptual and logical data models.

4. **Data Flow Diagram**. You may include as many separate diagrams as necessary to illustrate all parts of the new BHD system. At a minimum, you must demonstrate how and where the information from each major input is distributed and stored and how and from where each major output is retrieved and generated.

5. **Design Repository**. Include entries in the design repository for each of the following. A template document for the design repository is available from Blackboard.

    a. **Tables and attributes**. Define and describe each table that will be created from the entity-relationship diagram. Include a list of the attributes for each relation.

    b. **Data flows**. Give a brief description of each data flow. Identify the origin, destination, and data contents for each data flow.

    c. **Processes**. Give a brief description of each process. Use structured English or pseudocode to outline processing logic for each process.

6. **Form, Screen and Report Designs.** Designs for the following must be created using a computer tool of your choice (e.g., MS Word, MS Access, Visual Basic). Regardless of how it is created, a hard copy must be included in your project. For each item, create sample data to include on the item. It is each team's

responsibility to ensure that their sample item demonstrates all essential qualities of the item.

a. **Form Design.** Patient Information Sheet. This form is filled out by patients so that the office has accurate information. Include all the information specified in the narrative. Ensure that your form can be easily and accurately completed. Should have a professional appearance. It should make the kind of impression that gives clients confidence that BHD is a professional, top-notch operation.

b. **Output Report.** Weekly Provider Report. This report is used by the governing board to monitor the activities of the business. Include all the information specified in the narrative. The report must be easy to understand, the information well presented, and it should have a professional appearance. Style counts!

c. **Input Screen Design.** Screens to record services performed. Design any screens necessary to record the services performed during an appointment. Should be easy to use, require little training, and have a professional appearance. Style counts! But, if you go overboard it can detract from the usability of the screen (and your grade).

7. **Peer evaluations**. Each group member must evaluate every other person in the group, including themselves, at the end of the project. Peer evaluations are to be submitted separately to the instructor on the same day the project is due. **Individuals who do not turn in the peer evaluation, with all parts filled out, will not receive any points for the peer evaluation portion of the project (50 points or 25% of the possible points for the project).** I will not accept any late peer evaluations. Evaluations are considered late if they are not submitted to me before the time indicated as the due time for the project.

   A copy of the peer evaluation form is attached to this case document. *PLEASE NOTE: The peer evaluation form for the semester case is not the same evaluation for that was used during the semester for the group homework assignments.*

## Peer Evaluations

Peer evaluations are based on two factors, quality of work and level of effort. Two rules are in effect for peer evaluations.

1. No one may turn in a low evaluation of another group member unless I have been notified about the problem at least 2 weeks before the evaluations are due (i.e., November 22, 2002). This rule corresponds to the policy many organizations have that an individual must be counseled if his/her performance could lead to dismissal.

2. Each member of the group must be allowed to play a significant part in the development and implementation of the project. If an individual feels that he/she is being shut out by the group, the individual must notify me early. This rule is meant to preclude one or two individuals from monopolizing the project and then giving poor evaluations later.

Your evaluation of your fellow group members should not come as a “surprise” to them. In other words, you should be providing plenty of feedback to each other throughout the project. You may obtain a copy of the peer evaluation form from the course webpage.

## Project Guidelines

- I reserve the right to amend the project requirements
- No fluff. Address the points described above, but do so in a concise manner.
- Grammar and spelling matter (just as they will for a professional organization).
- The deliverables should look professional but not flashy.
- Bind all project deliverables together in a three-ring binder.
- Do not use plastic sheet holders for the pages of your project.
- Make sure that I can still read everything in your report after it is bound.
- Include a table of contents.
- Use tabs to mark the beginning of each project section.
- Include each group member’s name, phone number, and e-mail address on a title page.

**Hints**:

- Use a log book to record the activities that occur in your group meetings. This can help you to document design decisions that have already been established.
- Document your system as you design and build it. It will make your life easier, really. (See previous hint.)
- Get started early! You cannot build this at the last minute; things will not come together simply because there’s only a day or two left before the due date.
- Make frequent back-ups.
- The dental clinic problem is not a structured problem. Neither is system design and development. It is supposed to be somewhat fuzzy.
- To accurately identify data contents of inputs and outputs, you might benefit by actually creating the forms or reports discussed. This will be particularly helpful for the patient bill and insurance bill.

## Early Submission

Your graded project will receive up to 10 bonus points if it is completed and submitted for grading before November 29, 2002 at 4:25 p.m. It is not possible to receive more than 200 total points for the project. BE ADVISED, in the rush to turn the project in early, students often overlook many important details of the project and end up losing more than 10 points due to carelessness in completing the project!

## Project Evaluation

Your project grade will be based on the following criteria and weights. Use this information as guidance in allocating your effort.

| Project Requirement | Points |
|---|---|
| Context Level Diagram | 20 |
| Entity-Relationship Diagram | 30 |
| Data Flow Diagrams | 30 |
| Design Repository | 30 |
| Interface Design | 30 |
| Project Report | 5 |
| Project Details (grammar, spelling, binding, format, etc.) | 5 |
| Peer Evaluations | 50 |
| Total | **200** |

## Availability of Instructor

I am available for consultation during office hours to assist your team in understanding this case. If your team needs guidance from me, I expect at least two members of the team to meet with me. This means I will not give consultation sessions with a single member of the team. You can see me during office hours or use e-mail to schedule appointments with me (see syllabus policy).

If you meet with me to discuss the project, I will not meet with you unless you bring documentation of your current work. This documentation must be diagrams that are output from the computer tool of your choice. If you are not yet serious enough about your design that you have committed it to a tool, then your group has not done sufficient work on your own to merit feedback from me. Remember this is your group project not mine!

I will **NOT** be available for student consultation about this project for the last 72 hours before the project is due. This means that after office hours on Tuesday December 3, 2002, I will not meet with any group to discuss the project and I will also not discuss the project via e-mail or phone. After the deadline, you are on your own. This is to encourage you to get to work on the project now. Just because your group puts off the project until just before the due date does not mean that I have to scramble to help you get the project done.