

Course ID Number: ADC 5010

Course Title: Public Management Information Systems

No. of Credits: 2

Graduate School of International Relations
International University of Japan

Term: Spring 2012
Timetable: 4th and 5th period on Fri.

Instructor: Hun Myoung Park
Office: 328
Phone: 424

Course Introduction

Public management information systems (PMIS) studies the ways that government can use public information systems or electronic government (e-government) effectively to improve productivity, transparency, and accountability in the public sector.

Information systems consist of not only technologies but also people and organizations. The objective of this course is to help future public managers understand fundamental concepts and technological building blocks of information systems; understand the importance of technology standard and accessibility/usability of Web sites, and develop an ability to manage information systems in the public and nonprofit sectors. The managerial issues and politics associated with the government information systems are reserved for the Public Information Policy and Management in the fall term.

INTERNATIONAL UNIVERSITY OF JAPAN
Public Management and Policy Analysis Program

ADC5010
Public Management Information Systems
(2 Credits)
Spring 2012

Classroom: D204 and PC124 (Lab)
Time: 14:40-17:50 on Friday
Web Page: <http://www.sonsoo.org/itis/pmis/>
E-mail: kucc625 at iuj.ac.jp

Instructor: Hun Myoung Park
Office: 328
Office Hour: 13:30-14:30 (F)
Telephone: (025) 779-1424

Prerequisites: There is no prerequisite for this course, but students are expected to have some basics of World Wide Web and information systems.

INTRODUCTION

Public management information systems (PMIS) studies the ways that government can use public information systems or electronic government (e-government) effectively to improve productivity, transparency, and accountability in the public sector.

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At the end of semester, students should be able to:

- Understand differences between public and private information systems
- Understand key concepts and terminologies of information systems
- Design and develop simple relational databases and connect them to WWW
- Acquire basic knowledge of HTML/XHTML and cascading style sheets (CSS)
- Understand concepts and key issues in electronic government
- Understand development strategies of electronic government
- Understand and evaluate accessibility of e-government

This course is, despite its emphasis on public and nonprofit sectors, related to Foundations of Web Technologies (ITC 5040), Database Design and Management Strategies (ITC 6040), and IT Strategy & Policy Planning (QIS 6080) of the Graduate School of International Management (GRIM). This course is NOT recommended for those who have already taken ITC5040, ITC6040, and ITC6080 (or QIS 6080) or those who have professional experience in WWW and databases.

COURSE ORGANIZATION

This course consists of a series of lectures, 4-5 labs, and students' presentations. Students are encouraged to participate in class by asking questions and actively joining discussions. Also, students are highly recommended to take advantage of talking with the instructor during office hours or by setting up appointments.

ASSESSMENT

Attendance and Participation: Students should attend ALL classes and labs, and actively participate in class and group project. Each unexcused absence results in THREE POINT deduction from the final score. Extra credits may be given to students who make an outstanding contribution to class and/or group project and who show great performance in assignments.

Exams: There will be mid-term and final exams. These exams will respectively cover the topics and materials of the first 5 weeks and later 5 weeks. The format is similar to homework assignment to be explained below. Both exams are open-book and open notebook format. Students MAY NOT communicate each other during exams.

Assignments: There will be about 4-5 assignments given to individual students. One assignment is to present a book chapter or journal article in 10 minutes in class. Write down your student ID and name first. Arrange your answers in ascending order (1.1, 1.2, 1.3 ...). DO NOT use double or triple columns; use only single column.

Group Projects: Each student must take part in a group and complete a group project: e-government evaluation (but it depends on the number of enrolled students). Each student is asked to evaluate participation of other members in the group.

Students are expected to evaluate accessibility and usability of a Web site of a state-level (as opposed to government portal) government or a department (or agency). A check list and detailed guidelines will be provided through the course Web page.

Each group has 10 minutes for presentation. Organize presentation materials clearly and logically. Hit the highlight and avoid redundancy. Create tables in a professional format. Group leaders should submit a draft of presentation to the instructor at least two days before the class. Audience's evaluation is taken into account in grading.

Late Penalties: All weekly memos and other assignments should be handed in to the instructor at the start of the class on the due date, unless otherwise instructed. Late assignments will be accepted with penalty of 20% if submitted within a day after the time due. Under no circumstances will late assignments be accepted after one day of the due date without prior authorization from the instructor.

Format and Styles: All assignments and project memos should be written in electronic forms (Microsoft Word, OpenOffice Writer, ...). Use the default format and styles (A4, default margin, Time and Roman font, 12 point, single-spaced, etc.). If you are not sure, please download the template file from the course Web page.

Organize contents clearly and logically; hit the highlights and avoid redundancy; and use proper public management jargons and grammatically correct English.

GRADING

The final grade is based on a composite of course requirements mentioned above. Their weights are:

- (1) Midterm exam 20%
- (2) Final exam 25%
- (3) Assignment (including personal presentation) 25%
- (4) Group project (including peer evaluation) 15%
- (5) Class attendance/participation 15%
- (6) Extra credits up to 5%

That is, your final score is $(1) \cdot .20 + (2) \cdot .25 + (3) \cdot .25 + (4) \cdot .15 + (5) + (6)$

Grading for this course is as follows:

96 - 100: A (4.0)	66 - 69: B- (2.5)
90 - 95: A- (3.75)	60 - 65: C (2.0)
80 - 89: B+ (3.5)	< 60 : F
70 - 79: B (3.0)	Incomplete (I), withdrawal (W)

If you object to any grading decisions, you may appeal the grade to the instructor. The appeal must be given along with original assignments, memos, and/or exams to the instructor no later than 24 hours after receiving the grade (grade will be announced online).

CLASS POLICY

Attendance and Lateness: Students should attend each class and be present when each class begins. Being 15 minutes late is considered absent from the class. Excused absences for special circumstances (e.g., sickness) may be arranged in advance and will not influence the attendance grade. There is no any formal seating chart. Each unexcused absence results in THREE POINT deduction from the final grade.

Academic Misconduct: Students should not only gain knowledge and skills, but also build their character. Particularly, public managers should equip themselves with high and strict professional standards and ethics. All students should complete their own work and be evaluated based upon that work. Students should avoid academic dishonesty and misconduct including *plagiarism*, *fabrication* (falsification), and *cheating* (collaboration). The penalties for violation include sanctions up to and including expulsion from the university.

A student must not reproduce ideas, phrases, or sentences of another person without appropriate acknowledgment (plagiarism). Students must give credit to the originality of others and acknowledge an indebtedness whenever they quotes/paraphrases another person's actual words, either oral or written; employs another person's idea, opinion, or theory; or borrows facts, statistics, or other illustrative materials. Copying and pasting some parts of textbooks, journal articles, and/or Internet resources without citation involves both plagiarism and fabrication. Be honest with yourself and the instructor by clearly distinguishing your ideas from others' ideas.

Cheating is an attempt to use or provide unauthorized assistance, materials, information, or others. Most common examples include discussing problem solving, looking at (stealing) other students' work, showing your work to other students, sharing electronic files (Excel and

wordprocessor) with other students, and using unauthorized external assistance such as tutors, commercial companies, and electronic devices (e.g., smartphone). In order to avoid unintended cheating, keep your own work safe.

Free riding and/or irrelevant peer-evaluation in a group project are misconduct for the group and class. All aspects of IUJ' student code of conduct (see students' curriculum handbook) apply to this class. It is students' responsibility to be aware IUJ's policy on academic dishonesty and misconduct including sexual harassments (http://www.iuj.ac.jp/web/iuj_section.cfm?item=090506). If you need clarification regarding this issue, contact the instructor or OAA (ofcgsir@iuj.ac.jp) immediately.

Course Feedback: Given diversity in their backgrounds, students are always encouraged to make comments and suggestions on this class (e.g., reading load, lecturing, presentation, and class discussion) in order to improve this course. Any form of communication (e.g., walk-in, phone, email, facebook, etc.) will do. No feedback will influence your grade negatively in any case.

Use of Electronic Devices: Before each class begins, students **MUST** turn off their cellular phones, CD/MP3/DMB players, and other electronic devices that may distract the instructor and their classmates. However, laptops or netbooks (mini laptops) are allowed for use in class unless they disturb others.

Computer Software Used: This course uses text editors (e.g., Window Notepad), Microsoft Excel, Access, and/or PHP and equivalent. But related professional knowledge and skills are not required.

Computer Literacy: Students should be able to access computers in IUJ computer clusters and be familiar with Microsoft Excel, wordprocessors (e.g, Microsoft Word and WordPerfect), and Web browsers (e.g., Firefox and Safari). If you are not feeling comfortable in this computing requirement, please talk to the instructor **IMMEDIATELY**.

IUJ Electronic mail: All students must use the university electronic mail to communicate with the instructor and other classmates. Students SHOULD peruse emails that the instructor sends in order for additional explanation and comments. Also, students may contact the instructor using google chat (text, audio, or video) or facebook.

Course Web Page: <http://www.sonsoo.org/itis/pmis/> provides the latest course schedule, announcements, and various course materials including lecture notes. Students **MUST visit this Web page time to time** to check announcements and materials available.

READING MATERIALS

This course requires one textbook below, selective book chapters, and journal articles. Lecture notes will be provided through the course Web page. Students should read all required readings listed in the course schedule before the class.

Stair, Ralph, and George Reynolds. 2012. *Information Systems*. 10th ed (International Edition). Course Technology & Cengage Learning. ISBN 978-1111-532932.

Students are recommended reading the following books depending on their interests. Aspray (2004), Chen et al. (2008), Shea & Garson (2010), and Rocheleau (2006) provide a big picture of information technology policy and electronic government. Hoffer, George & Valacich (2010) discuss system analysis and design in conjunction with databases and system development life cycle. Thatcher et al. (2006), although technical somehow, provide good backgrounds for the accessibility of Web sites and Web standards including World Wide Web Consortium's (<http://www.w3.org>) Web Content Accessibility Guidelines (WCAG) and the U.S. Section 508. For fundamentals of computer systems, see Morley and Parker (2012) and Forouzan and Mosharraf (2008). These books are reserved at the library.

- Aspray William, ed. 2004. *Chasing Moore's Law: Information Technology Policy in the United States*. Raleigh, NC: Scitech Publishing. ISBN-10: 1891121332
- Chang, Ha-joon. 2007. *Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism*. Bloomsbury Pres. ISBN: 978-1596915985.
- Chen, Hsinchun, Lawrence Brandt, Valerie Gregg, Roland Traunmuller, Sharon Dawes, Eduard Hovy, Ann Macintosh, and Catherine A. Larson, eds. 2008. *Digital Government: E-government Research, Case Studies and Implementation*. New York: Springer. ISBN-10: 0387716106.
- Forouzan, Behrouz, and Firouz Mosharraf. 2008. *Foundations of Computer Science*, 2nd ed. Cengage Learning EMEA.
- Hoffer, Jeffrey A., Joey George, and Joe Valacich. 2010. *Modern Systems Analysis and Design*, 6th ed. Pearson Education. ISBN-10: 0135094895
- Morley, Deborah, and Charles S. Parker. 2012. *Understanding Computers: Today and Tomorrow*. 14th ed. South-Western College Publishing. ISBN 978-1133190011. (12th and 13th edition will also be fine)
- Rocheleau, Bruce A. 2006. *Public Management Information Systems*. Hershey, PA: Idea Group Publishing. ISBN-10: 1591408075.
- Shea, Christopher M., and G. David Garson. 2010. *Handbook of Public Information Systems*. Boca Raton, FL: CRC Press. ISBN-10: 1439807566
- Thatcher, Jim, Michael R. Burks, Christian Heilmann, Shawn Lawton Henry, Andrew Kirkpatrick, Patrick H. Lauke, Bruce Lawson, Bob Regan, Richard Rutter, Mark Urban, and Cynthia D. Waddell, eds. 2006. *Web Accessibility: Web Standards and Regulatory Compliance*. Berkeley, CA: Friends of. ISBN-10: 1590596382

WEEKLY SCHEDULE

* This schedule is tentative and subject to change. Students should check the latest schedule on the course Web site from time to time. The first class is scheduled on Friday, April 13th.

1st Week: Introduction to Public Information Systems

The first week introduces public management information systems and discusses similarity and difference between public and private information systems.

Required: Chapter 1 and 2

- Bozeman, Barry, and Stuart Bretschneider. 1986. "Public Management Information Systems: Theory and Prescription." *Public Administration Review*, 46(6): 475-487.

Optional: Rocheleau (2006) chapter 1, 11

Lab: HTML/XHTML

2nd Week: Building Blocks of Information Systems

Information systems consist of hardware building blocks (e.g., central processing unit, central memory unit, storage units, and input/output) and software packages (e.g., system software, application software, open source software).

Required: Chapter 3 and 4; Chang (2007) chapter 6

Lab: Cascade style sheets (CSS)

3rd Week: Internet and World Wide Web

This week introduces basics of telecommunication and Internet technologies and then discusses user-centered design, accessibility, and usability of Web sites.

Required: Chapter 6 and 7; Asprary (2004) chapter 2

- Chen et al. (2008) chapter 8; selected chapters from Thatcher et al. (2006)
- <http://www.w3.org/TR/WCAG20/> (Web Content Accessibility Guideline 2.0)

Lab: Dynamic HTML/XHTML

4th Week: Electronic Government

Electronic government (digital government) is a collection of Web-based information technology applications used in the public sector.

Required: Chapter 6; Rocheleau (2006) chapter 5; Aspray (2004) chapter 4

- Coursey, David, and Donald F. Norris. 2008. "Models of E-Government: Are They Correct? An Empirical Assessment." *Public Administration Review* 68(3): 523-536.

5th Week: System Analysis and Design

This week discusses how information systems are designed and developed.

Required: Chapter 12 and 13; Rocheleau (2006) chapter 2

Optional: Selected chapters from Hoffer, George, & Valacich (2010).

Midterm exam

6th Week: Database and Web

This week discusses database concepts and development of Web-based applications.

Required: Chapter 5

Lab: Database

7th Week: Service Development and Accessibility

This week discusses development strategies (selection and concentration) of public services for e-government and accessibility issues.

Required: Chapter 8 and 9

- Selected chapters from Chen et al. (2008) and Shea & Garson (2010)

Lab: Database and Web

8th Week: Financing and Maintaining Public Information Systems

This week touches implementation and maintenance of public information systems, and then discusses financing issues (e.g., outsourcing and user fees).

Required: Rocheleau (2006) chapter 3, 7

- Selected chapters from Chen et al. (2008) and Shea & Garson (2010)
- Park, Hun Myoung. 2005. "A Costs Benefits Analysis of the Seoul OPEN System: Policy Lessons for Electronic Government Projects." Proceedings of the 38th Hawaii International Conference on System Sciences in Hawaii, HI, January 3-6, 2005.

9th Week: Evaluation of Public Information Systems

This week discusses methods and practices to evaluate public information systems (e.g., productivity paradox, cost benefit analysis, users' satisfaction, accessibility, and usability).

Required: Rocheleau (2006) chapter 9

- Selected chapters from Chen et al. (2008) and Shea & Garson (2010)
- Park, Hun Myoung. 2012. "The Web Accessibility Crisis of Korea's Electronic Government: Fatal Consequences of the Digital Signature Law and Public Key Certificate." Proceedings of the 45th Hawaii International Conference on System Sciences in Hawaii, HI, January 4-7, 2012.
- <http://www.indiana.edu/~uitssur> (UITS User Satisfaction Survey, Indiana University)

10th Week: Student Presentation

Project presentation: accessibility of e-government.

Final exam