Indiana University-Purdue University Indianapolis

School of Public and Environmental Affairs Spring

SPEA-V 516 - *Public Sector Management Information Systems*

Course Syllabus

1. Course Number and Title - SPEA-V 516 - Public Management Information Systems

    This is an online course through the Oncourse system.

2. Instructor - Jerry Schulz, 4237 S. Lenox St. Milwaukee, WI, 53207
    (414) 747-5626 (home), (414) 828-5320 (cell), schulzj @iupui.edu

    I have no set office hours; please feel free to call or e-mail, although you can make an appointment if you wish.

3. Dates of Course -Weeks of January 11 through April 30 (no classes in week of Spring Break, March 15). A take-home final exam is due on May 6 at the end of the Final Exam Week.

4. Required Books and Readings

    - *The Big Switch; Rewiring the World, from Edison to Google,* Carr, Nicholas, W. W. Norton and Company, 2009, 2008

    - *Government 2.0 – Using Technology to Improve Education, Cut Red Tape, Reduce Gridlock, and Enhance Democracy,* Eggers, William D., Rowman & Littlefield, 2007

    - *Information Technology in Local Government: a Practical Guide for Managers,* Schulz, Jerome, International City and County Management Association, 2001

    - Also, a number of supplemental readings will be posted on the Oncourse web site for the course. There will be several supplemental readings each week and the syllabus will be updated occasionally as these readings are added.

5. Course Learning Outcomes

    The course has these nine learning objectives for students. Upon successful completion of the course, a student should be able to:

    - Become aware of the general management challenges that the use of information technology presents for governments and be able to develop appropriate policies that address these challenges.

    - Be aware of options for the organization of technology units within government and for the contracting of technology services.

    - Be able to apply best practices to the management of computer hardware, software, networking, and other technologies in government.

- Appreciate how the use of "electronic government" technology can transform government and be able to help governments develop and manage effective programs of e-government use.

- Be able to apply best practices for implementing and integrating data systems in government settings.

- Appreciate how information technology can be used for strategic as well as operational advantage and be able to identify truly strategic uses of technology.

- Be able to develop a strategic plan for technology use for a government organization.

- Acquire the basic skills for managing an information technology project and be able to develop a task plan for a technology project.

- Be able to distinguish the unique characteristics of IT use for local government, state governments, the federal government, and non-profit organizations.

6. SPEA Policies

   The SPEA Syllabus Addendum, which is attached to this syllabus, explains SPEA's academic policies for Academic Misconduct, Civility and Disorderly Conduct, Communication between Faculty and Students, Students Needing Support from Adaptive Educational Services, Students Called to Active Duty, Course Withdrawal, Incompletes, Grade Changes, and the Final Exam Schedule. Each student is responsible for understanding and following all school policies.

7. Assignments

   The course has a number of assignments, most of which have point values toward the final grade. There is at least a small assignment for almost every week:

   - Complete weekly readings as indicated and view the weekly slide shows.

   - Participate in each of 15 class discussions in the Oncourse discussion forums and post at least one response each week. Five of the 15 postings will be graded (500 points).

   - Post a report of at least 300 words on a news article regarding any topic in government information technology for the week of January 11 (100 points).

   - Locate a news article or journal article or other source reporting on an implementation of technology in the public sector. Post a link to the article along with a 300 word statement for the week of January 18. In your statement describe the impact that you feel this technology will have on the agency involved and give your opinion as to whether this impact will be operational or truly strategic. Also give some thoughts on what you feel will be some obstacles to the realization of the benefits of the technology (100 points).

   - Identify a web site or any other sort of electronic commerce or communication initiative of a federal, state, or local government, and for the week of January 25 post

an analysis of at least 300 words, describing the site and explaining why or why not you feel the initiative is effective (100 points).

- Prepare a report of at least 600 words on an analysis of a technology being used in the public sector. Post this report for the week of February 1. In your analysis describe the technology being used, trace the evolution of its development and use, and analyze the costs and benefits of its use (100 points).

- Identify a current telecommunications project at the state or municipal level, which could be either in development or completed, and develop an analysis of at least 600 words for the week of February 8 on what you feel the benefits of the project are or will be (150 points).

- After reading the article on "The City's Computers Are an Incompatible Muddle...," post a statement of at least 600 words for the week of February 15 outlining a program with at least three best practices measures you feel that a local government in a similar predicament should take to improve the effectiveness of its technology (150 points).

- Consider how the activities of purchasing and contract administration in the public sector are more challenging or at least different for technology goods or services than for other types of goods and for the week of February 22 develop an analysis of 300 words on this topic (100 points).

- Research a case (possibly from our readings) on the implementation of a data system, and for the week of March 1 provide an analysis of at least 450 words on the costs and benefits of this system (100 points).

- Identify a current initiative involving collaboration among governments on the use of technology in the public safety arena (e.g., 9-1-1 dispatch, radio interoperability, etc.), and for the week of March 8 post a statement of at least 600 words explaining why you do or do not feel that this initiative is good public policy (150 points).

- Identify a real or hypothetical public sector problem being solved through the use of technology. Draw on the material on project management presented in the course and other sources to develop a project plan for a solution to the problem. Develop project documents which would be used in this solution including at least four from the list of scope, task plan, budget, cost benefit analysis, and change management strategy. Submit these documents for the week of April 5 (250 points).

- Consider the current technology use of your employing government, the city or village in which you live, or another government in the area, and develop an analysis of at least 600 words for the week of April 19 on three strategic planning directions that you feel the government should adopt (200 points).

- Submit a take-home final exam on or before May 6 which will consist of several essay questions (500 points). Each of the ten answers for the final exam should be at least 150 words in length but not more than 300 words.

Note that in the later weeks of the course there is not an assignment each week but each assignment is for a greater number of points, since these assignments require more research and general effort. More information on how the assignments will be graded will be provided during the course.

8. Assessment and Grading

Below is a summary of the contribution of each assignment to the final grade:

Assignment	Points	Percent
Participation in Discussion Forums (Five are Graded)	500	20%
Analysis of News Article	100	4%
Statement on Strategic versus Tactical	100	4%
Analysis of a Web Site	100	4%
Analysis of a Technology	100	4%
Analysis of a Telecommunications Initiative	150	6%
Statement on Best Practices	150	6%
Analysis of Purchasing and Contracting	100	4%
Costs and Benefits of a Data System Implementation	100	4%
Statement on Collaboration in Public Safety	150	6%
Project Task Plan	250	10%
Analysis on Strategic Planning Directions	200	8%
Take-Home Final Exam	500	20%
	2,500	100%

The total points from the assignments will be translated into final grades in this way:

Letter	From	To	GPA Points
A	2,351	2>500	4.0
A-	2,301	2,350	3.7
B+	2,251	2,300	3.3
B	2,201	2,250	3.0
B-	2,101	2,200	2.7
C+	2,001	2,100	2.3
C	1,951	2,000	2.0
C-	1,901	1,950	1.7
D+	1,851	1,900	1.3
D	1,801	1,850	1.0
D-	1,751	1,800	0.7
F	0	1750	0.0

The discussion forum postings will be graded in this way:

Criteria	Minimum	Points	Basic	Points	Advanced	Points
Content	Responses poorly related to topic.	20	Responses shows some understanding of topic	25	Thoughtful responses; responds to opinions of others.	30
Critical Thinking	Poor or erroneous interpretation of readings and other postings.	20	Doesn't go beyond agreeing with others.	25	Interprets readings and postings of others in insightful ways.	30
Reliance on Sources	Makes no references to outside sources.	25	Makes some reference to readings and other sources.	30	Makes insightful reference to readings and other sources.	40

For each student to get the full benefit of the assignments, it is important that they be done on time. Assignments should be posted no later than midnight of the Sunday the course week ends (e.g., Sunday, January 17 for week starting January 11). Late assignments will be penalized 10% if they are less than one week late and 20% if they are more than one week but less than two weeks late. Assignments that are more than two weeks late will receive a grade of zero.

If a student has not participated in a discussion forum in one of the weeks that participation is graded, the participation from a previous week that was not graded will be used, although with a 20% penalty. If there is not a previous participation that was not graded the grade will be zero.

9. Use of Oncourse

This course is an online course which uses IUPUI's Oncourse online learning technology. We will use Oncourse in several ways:

• We will post all of our supplemental readings in the Resources area on Oncourse along with a weekly kickoff letter and a slide show on the topics for the week.

• We will use the discussion forums in the Oncourse Message Center for weekly online discussions.

• Students will post all completed assignments to Oncourse.

You may be somewhat apprehensive if you have not yet used the Oncourse technology, but Oncourse provides a variety of training and help functions, which can be accessed at https://oncourse.iu.edu/portal. I hope you will find the system intuitive and easy to use.

Please be sure to consult the instructor if you are having any problems or concerns with the online aspects of the course. Use of Oncourse assumes you regularly check your IUPUI e-mail account (e.g., smithj@IUPUI.edu).

All resources and discussion forums and topics for each week in Oncourse will be posted no later than Sunday at midnight, and the week begins.

10. Course Schedule of Topics, Readings, Assignments, and Discussion Topics

Topic	Readings	Assignments	Discussion Topics
Week 1-			
Getting Started - Introductions, Course Requirements. Use of Oncourse etc.			Introductions of Class Members
The Technology Challenge in Public Administration	Carr, Ch. 1-4. Schulz. J., Ch. I,	Analysis of News Article	
Week 2			
Strategic Use of IT in Government	Eggers, Ch. 1 and 2, Schulz, J., Ch. 17	Statement on Strategic vs. Tactical	Impact of Technology on the Government Workplace
Week 3			
Electronic Government	Eggers, Ch. 5-7, Schulz, J., Ch. 10	Analysis of a Web Site	Electronic Government and Effectiveness
Week 4			
Technology Hardware, Software, and Infrastructure	Schulz, J., Ch. 6	Analysis of a Technology	
Evolution of Platforms - Cloud Computing	Carr, Ch. 5 and 6		
Personal and Team Productivity	Carr, Ch. 7, Schulz, J., Ch. 7		Providing Productivity Technology to Government Staff

Week 5			
Computer Networking and Related Technology	Schulz, J., Ch. 8		
Security	Carr, Ch. 9 and 10, Eggers, Ch. 9 and 10		Managing Security Threats
Government Role in Telecommun ications		Analysis of a Telecommunications In itiative	
Week 6 -			
Organizi ng and Contracti ng for IT Use	Balint, K., "The City's Computers Are an Incompatible Muddle," Schu lz, J ., Ch. 3	Statement on Best Practices	Contracting of TT Services
The Technology Workforce and Working with IT			
Managing Technology Service	Schu lz, J ., Ch. 9		
Week 7 -			
Purchasing and Contract Management	Schulz, J.• Ch. 5	Ana lysis of Technology Purchasing and Contracting	Changes in Technology Purchasing
Electronic Government - The Business to Government Interface			
Optimizing Workflow			

Weck 8			
Data Systems		Costs and Benefits of a Data System Implementation	Purchased Versus Custom Data Systems
Financial and Enterprise Resources Planning Systems	Schulz, J., Ch. 11		
Week 9			
Human Services Systems	Schulz, J., Ch. 15		Privacy Issues in Human Services Systems
Criminal Justice and Public Safety Systems	Schulz, J., Ch. 14	Statement on Collaboration in Public Safety	
Break			
Week 10			
Project Management	Eggers, Ch. 11, Schulz, J., Ch. 4		Obstacles in Government Technology Projects
Week 11			
Land-Related Systems, Public Works and Utilities, and Geographic Information Systems	Schulz, J., Ch. 12, 13, and 16		The Challenge of Public Works Technology
Technology Issues in Transportation	Eggers, Ch. 4		
Voting Technology	Eggers, Ch. 8		

Week 12 -			
Project Management IJ		Project Task Plan	
Data Warehousing			Managing the Volume of Government Data
Week 13			
Strategic Technology Planning	Schulz, J., Ch. 2		Investing in Technology
Week 14 -			
Special Technology Issues at the State and Federal Level			Giant Scale Technology Projects
Strategic Technology Planning II		Analysis on Strategic Planning Directions	
Week 15 -			
Technology Issues in Non-Profits			
Technology in Education and the Digital Divide	Eggers, Ch. 3.		Using Technology to Bridge the Digital Divide
Some Final Considerations	Carr, Ch.8 and 1 1		
Final Exams -			
Final Exam		Take-Home Final Exam	