

UNIVERSITY OF SOUTHERN CALIFORNIA  
USC PRICE SCHOOL OF PUBLIC POLICY  
**COURSE SYLLABUS: PPD 654**  
**INFORMATION TECHNOLOGY MANAGEMENT IN THE PUBLIC SECTOR**  
**Fall 2014**

Instructor: Ali Farahani, Ph.D., farahani@usc.edu

Classroom: VKC 201; Office: RGL 107

Office Hours: 5:00-6:00 p.m. Mondays

Class Time/Day: 6:00-9:20 p.m. Mondays

**REQUIRED TEXTBOOK:**

- Reading materials will be provided online by the instructor.
- Lectures will also be made available to students via iTunesU.

**COURSE DESCRIPTION:**

The course is designed for graduate level students in the Price School of Public Policy to provide a scholarly and practical introduction to the application of information technology in the public sector. We will use the Electronic Government (E-Government) framework to cover various aspects of information technology including E-Services, E-Democracy, and E-Management.

**COURSE OBJECTIVES:**

This course is intended to familiarize participants with the significant role of information and computer technology in modern organizations in general and government agencies in particular. Emphasis is placed on the practical application of computer and information technology to real-world problems and decision environments. This course is designed to assist the student to:

- focus on information technology as an enabler of business strategies and initiatives;
- gain a policy and organizational perspective on Information Technology and its relationship to strategic planning and business goals;
- gain a basic understanding of new technologies including **Digital Government, Big Data, Open Data, Data Sciences and Data Analytics, Cloud Computing, Digital Identity Management, Social Networks, Data-driven Outcome Measurement, and Service Oriented Architecture** and how they impact government operation and structure;
- study the changing models of government service delivery and concepts and practices of e-government;
- align information systems with people and policies consistent with business objectives of governmental entities.

## COURSE REQUIREMENTS AND EXPECTATIONS

### Class Participation:

Student participation in classroom discussions is an important basis of learning in this course. It is also important to the student's personal growth and for building presentation skills, both of which are very important in a successful professional career. This class provides plenty of opportunity to learn through participation.

### E-Government Project/Paper:

Each student will conduct a research project that explores a particular topic in managing information technology in government. Projects must be based on field research – talking to people involved in information systems as developers, managers, end-users, or vendors. The project topic must be approved in advance by the instructor. Students will select one of the major topics of the course as the basis for their projects. This has to be a major information technology issue for a local, state, or federal government.

There are three deliverables for the project:

1. project plan due six weeks before the presentation
2. a 15-minute in-class PowerPoint presentation on project findings
3. a 15-20 page project report, due at the time of project presentation

### CLASS SCHEDULE:

	Date	Topic	Reading	Assignment
1		<p><b>Introduction</b> to the Course; What are the 10 questions this course will cover? <b>Information Technology and Administrative Reform; the Promise of E-Government.</b></p> <p><b>How Information Technology and the Internet Have Changed the World; Governance in a Connected World.</b></p>	<ul style="list-style-type: none"> <li>• <b>2013 Digital Future Report;</b></li> <li>• <b>The Internet and the 2012 Election;</b></li> <li>• <b>Internet 2013 in numbers</b></li> </ul>	
2		<p><b>Building a Business Case</b> for <b>Information Technology Projects; Return on Investment (ROI) Analysis; Measuring the Value of Information Technology; Strategic</b></p>	<ul style="list-style-type: none"> <li>• <b>Creating a Business Case for Master Data Management;</b></li> <li>• <b>Metrics:</b></li> </ul>	

		<b>Business Planning and Information Technology.</b>	<b>Improving IT Value, Justifying IT Investment</b>	
3		<p><b>A Framework for E-Government: E-Services, E-Democracy, E-Management; Strategic Planning and E-Government.</b></p> <p><b>How IT can Improve the Efficiency and Effectiveness of Government Organizations: The Four Phases of E-Government.</b></p> <p><b>A Review of the Scholarly Literature on E-Government.</b></p>	<ul style="list-style-type: none"> <li>• <b>Using the E-Government Assessment Questionnaire;</b></li> <li>• <b>Gartner’s Open Government Maturity Model;</b></li> <li>• <b>Gartner: Four Phases of E-Government</b></li> </ul>	
4		<b>Data Volume, Data Variety, Data Velocity: Big Data; Data Driven Organizations and Electronic Government; Structured and Unstructured Data, The Internet of Things; Data Growth and Hadoop technologies.</b>		
5		<b>Data Sciences; Information Management; Data Architecture, Metadata Management, Information Taxonomy, Semantic Web, Data Profiling and Data Quality; Entity Resolution.</b>	<ul style="list-style-type: none"> <li>• <b>Articles</b></li> </ul>	
6		<b>Social Networks: Governance and Government in a connected world. Social Network Analysis; Graph Theory.</b>	<ul style="list-style-type: none"> <li>• <b>Articles</b></li> </ul>	
7		<b>Focusing on Government’s Core Competencies; Cloud Computing, Software as a Service; Service Oriented Architecture (SOA) and</b>	<ul style="list-style-type: none"> <li>• <b>Cloud Computing: Transforming IT;</b></li> <li>• <b>Moving Out:</b></li> </ul>	<b>Project outline due</b>

		<b>Web Services Service Integration with APIs.</b>	<b>Externalization of IT</b>	
8		<b>Information Security and Privacy: How Transparency and Trust Impact Online Government.</b>	<ul style="list-style-type: none"> <li>Articles</li> </ul>	
9		<b>Democracy Online: Government Transparency and Citizen-Government Engagement, enabled by technology; the Digital Divide; Internet Voting. Shifting the Paradigm: agency-centric to citizen-centric service delivery.</b>	<ul style="list-style-type: none"> <li>Articles</li> </ul>	
10		<b>Government Transactions: from Inline to Online; Managing Digital Identity. Authentication and Authorization in a digital world. OAuth, OneID.</b>	<ul style="list-style-type: none"> <li>Articles</li> </ul>	
11		<b>Open Data; transparency and accountability in the age of the Internet; Open Data and Economic development; machine-readable open data; OData framework.</b>	<ul style="list-style-type: none"> <li>Articles</li> </ul>	
12		<b>Data Analytics: using data to make better decisions; Measuring Program Outcome and Business Performance with Data; Business Intelligence, descriptive and predictive data analytics; new developments in cognitive data analytics. Knowledge Management.</b>	<ul style="list-style-type: none"> <li>Articles</li> </ul>	
13		<b>Managing IT Projects; Business Process, People, and Technology.</b>	<ul style="list-style-type: none"> <li>Articles</li> </ul>	

		<b>Basic principles of successful project management.</b>		
<b>14</b>		<b>E-Services: Case Studies in Municipal Websites; What Works and What Does Not; E-Government for an Inclusive Society.</b>		
<b>15</b>		<b>Best Practices in E-Government: Health and Human Services case studies.</b>		<b>Project report due</b>
		<b>Fall semester classes end</b>		

*Any Student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The telephone number for DSP is (213) 740-0776.*