Course Syllabus

IST 726 (Online)
Enterprise Architecture: Concepts & Practices

Fall 2013
August 26 to December 8, 2013
Syracuse University,
School of Information Studies

Instructor: Scott A. Bernard, Ph.D.
Professor of Practice
sabernar@syr.edu

Course Description & Objectives:
IST 726 is a graduate-level 3-credit online course that introduces concepts and techniques associated with organization-wide strategic, business, and technology planning – a uniquely holistic viewpoint that characterizes the current field of Enterprise Architecture (EA). Dr. Bernard uses a uniquely integrated approach to these three planning areas to present EA as it is being used in the public and private sectors at the leading edge to improve organizational efficiency through agile, adaptive designs.

This is not a course on information systems development, web/application programming, database development, or network design. The course focuses on understanding how information technology resources can best be leveraged to support an organization’s strategic goals and business requirements. Basic proficiency is developed in the understanding of several EA methodologies, frameworks and documentation techniques, including the EA³ “Cube” Framework that has been used by a number of governments and major corporations around the world, as well as the U.S. Federal Government’s approach to EA. Students will complete two online quizzes during the course to test their knowledge of required readings. Students will also answer a weekly online discussion question on the course website, and will prepare an individual final paper that provides the opportunity to research an EA topic of interest that the student selects and instructor approves.

During the course we will emphasize:
1. Experiential learning through online discussions, assignments, and projects.
2. Collaboratively learning concepts and documentation techniques with peers.
3. Self-learning with appropriate instructional support and timely feedback.

Upon completion of this course, the student will be able to:
* Utilize critical thinking skills to analyze complex patterns and relationships.
* Understand the basic concepts and documentation techniques of EA.
* Appreciate organizations in the context of highly complex operating environments.
* Understand how EA tools are used to document an organization’s architecture.
* Be able to relate strategy, business, and technology planning in the context of an EA.
* Understand the utility of the various EA frameworks and methodologies.
* Understand IT and business management issues related to EA.
* Be familiar with the U.S. Government’s approach to EA.
Course Materials:
There are two required textbooks that are available through commercial on-line book sellers. Readers #1 and #2 are free documents that are available in the Course Materials area of the class website. Throughout the semester, other articles and presentatons will be posted in the course materials area on special topics.


Reader #2: IT Security Architecture Frameworks; 2008. Dr. Mary Ho and Dr. Scott Bernard.

Course Assignments:
There are five graded assignments for this course, which are described below. The “Fall 2013 Weekly Course Schedule” on page 3 provides a week-by-week summary of these items.

<table>
<thead>
<tr>
<th>Assign.</th>
<th>Description</th>
<th>Grade Points</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Website Student Biography Posting</td>
<td>5</td>
<td>September 8</td>
</tr>
<tr>
<td>2</td>
<td>Quiz 1 (Textbook #1 and Reader #1)</td>
<td>15</td>
<td>October 6</td>
</tr>
<tr>
<td>3</td>
<td>Quiz 2 (Textbook #2 and Reader #2)</td>
<td>15</td>
<td>November 3</td>
</tr>
<tr>
<td>4</td>
<td>Course Final Paper / topic due to instructor Oct 13</td>
<td>40</td>
<td>December 9</td>
</tr>
<tr>
<td>5</td>
<td>Weekly Class Discussion Posting</td>
<td>25</td>
<td>Sundays 9pm EST</td>
</tr>
<tr>
<td>6</td>
<td>Monthly Phone Conferences – 8pm EST</td>
<td>---</td>
<td>Sept 10, Oct 22, Nov 19</td>
</tr>
</tbody>
</table>

Total Course Points 100

 Assignment 1: Biography Posting. Students will post their biography in the “Discussion” area of the course website by September 9th. Please post the biography in both the Discussions and the Assignment Dropbox areas.

 Assignment 2: Quiz #1. This quiz will cover topics from Textbook #1 and Reader #1. The quiz questions are provided in the form of a MS Word document that can be downloaded from the class WebCT site. Students are to complete the quiz questions on the same MS Word document and submit them in the “Assignment Dropbox” area of the WebCT site as a file attachment. The quiz will be available for viewing on October 1st and is due to the instructor by October 7th. Grading will consider how well the student’s answer reflects an understanding of the topic and relevant points from the course textbooks/readers as well as from outside sources. Students must use their own words in answering all Quiz #1 questions - do not cut/paste from other sources and use quotations very sparingly. Late submissions will receive lower grades.

 Assignment 3: Quiz #2. This quiz will cover topics from Textbook #2 and Reader #2. The quiz questions are provided in the form of a MS Word document that can be downloaded from the class WebCT site. Students are to complete the quiz questions on the same MS Word document and submit them in the “Assignment Dropbox” area of the WebCT site as a file attachment. The quiz will be available for viewing on October 29th and is due to the instructor by November 4th. Grading will consider how well the student’s answer reflects an understanding of each question and relevant points from the course textbooks/readers as well as from outside sources. Students must use their own words in answering all Quiz #2 questions - do not cut/paste from other sources and use quotations very sparingly. Late submissions will receive lower grades.

 Assignment 4: Course Final Research Paper. The purpose of the course final research paper is to provide the student with an opportunity to demonstrate the ability to critically evaluate a topic on Enterprise Architecture using information presented in the course. Final papers are to be individual research efforts, not team projects. Material from other works is to be kept brief with proper citation, as this paper is meant to reflect the analytic ability of the student. The topic for the paper must be approved by the instructor by October 13th (via regular Syracuse email). The paper is to be submitted in the “Assignment Dropbox” area of the course WebCT Site by IST 726 Enterprise Architecture – Fall 2013, Online (updated 6/11/13)
December 8th, 2012. The reports are to be double-spaced, use 12-point font, and 1” page margins. Report length is to be at least 25 pages, not including the bibliography. Paper submissions that are shorter than this 25 page length (not including the bibliography) will receive a lower grade. Report appearance, cogency, synthesis, and proper citations are key grading points. Students will not receive project reports back, but will receive comments via e-mail by December 31st if specifically requested. Grading will consider how well the student’s paper reflects an understanding of the selected topic and the relevant points from the course textbooks/readers, and especially from outside sources. The student’s own analysis and presentation of concepts is paramount – quotations from other material should be kept to a minimum – this paper is about showing how well the student can research and present a topic related to EA. Late submissions will receive a lower grade.

Assignment 5: Weekly Student Online Question and Discussion Posting. Students will post a 2-3 paragraph answer each week on the assigned question from the instructor in both the Assignment Dropbox and the Discussion area of the WebCT course site. Students must also comment on at least one other posting to create an ongoing threaded discussion. Postings are encouraged early in each new week to promote the discussion. Each weekly posting will be graded as late after Sunday at 9pm EST. Grading will consider how the student’s answer reflects an understanding of the topic and the relevant points from the course textbooks/readers as well as from outside sources. Students must use their own words in answering the weekly questions – do not cut/paste from other sources and use quotations very sparingly. Late submissions will receive a lower grade.

Assignment 6: Monthly Class-Wide Phone Conference. Three times during the course, a one-hour phone conference will be hosted by the instructor to discuss EA topics of interest and to answer student questions regarding course material and assignments. These phone conferences will be held on the following Tuesday evenings from 8-9pm EST: September 10, October 22, and November 19. The dial-in number will be provided prior to the calls in the Announcements area of the course WebCT site.

Course Grading:
Course final grades will be awarded as follows based on cumulative points from the five assignments, and there will be no extra credit assignments.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-93</td>
</tr>
<tr>
<td>A-</td>
<td>92-90</td>
</tr>
<tr>
<td>B</td>
<td>89-88</td>
</tr>
<tr>
<td>B+</td>
<td>87-83</td>
</tr>
<tr>
<td>B-</td>
<td>82-80</td>
</tr>
<tr>
<td>C+</td>
<td>79-78</td>
</tr>
<tr>
<td>C</td>
<td>77-73</td>
</tr>
<tr>
<td>C-</td>
<td>72-70</td>
</tr>
<tr>
<td>D</td>
<td>69-60</td>
</tr>
<tr>
<td>F</td>
<td>&lt;59</td>
</tr>
</tbody>
</table>

Course grades will be issued via the Syracuse University Registrar’s Office at the normal time at the end of the semester, and are available for viewing via your SU MySlice account.

Fall 2013 Weekly Course Schedule:

<table>
<thead>
<tr>
<th>Week #</th>
<th>Dates</th>
<th>Readings</th>
<th>Activities / Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 26 – Sep 1</td>
<td>Textbook 1, Chapters 1-4</td>
<td>Biography Posting by Sept 8th.</td>
</tr>
<tr>
<td>2</td>
<td>Sep 2 – Sep 8</td>
<td>Textbook 1, Chapters 5-10</td>
<td>Phone Conf. – Sep 10th at 8pm EST.</td>
</tr>
<tr>
<td>3</td>
<td>Sep 9 – Sep 15</td>
<td>Textbook 1, Chapters 11-13 and Appendices</td>
<td>Phone Conf. – Oct 22nd at 8pm EST.</td>
</tr>
<tr>
<td>4</td>
<td>Sep 16 – Sept 22</td>
<td>Reader #1</td>
<td>Final Paper Topic Due by Oct 13th.</td>
</tr>
<tr>
<td>5</td>
<td>Sep 23 – Sep 29</td>
<td>Reader #2</td>
<td>Quiz #2.</td>
</tr>
<tr>
<td>6</td>
<td>Sep 30 – Oct 6</td>
<td>Textbook 2, Chapters 1-4</td>
<td>Quiz #1.</td>
</tr>
<tr>
<td>8</td>
<td>Oct 14 – Oct 20</td>
<td>Textbook 2, Chapters 10-15</td>
<td>Phone Conf. – Nov 19th at 8pm EST.</td>
</tr>
<tr>
<td>9</td>
<td>Oct 21 – Oct 27</td>
<td>Textbook 2, Chapters 16-20</td>
<td>Phone Conf. – Dec 1</td>
</tr>
<tr>
<td>10</td>
<td>Oct 28 – Nov 3</td>
<td>Reader #2</td>
<td>Instructor will provide an article on a special topic</td>
</tr>
<tr>
<td>11</td>
<td>Nov 4 – Nov 10</td>
<td>Reader #2</td>
<td>Instructor will provide an article on a special topic</td>
</tr>
<tr>
<td>12</td>
<td>Nov 11 – Nov 17</td>
<td>Instructor will provide an article on a special topic</td>
<td>Phone Conf. – Nov 19th at 8pm EST.</td>
</tr>
<tr>
<td>13</td>
<td>Nov 18 – Nov 24</td>
<td>No Assignments – Thanksgiving Break</td>
<td>Final Paper Due on Dec 8th</td>
</tr>
<tr>
<td>14</td>
<td>Nov 25 – Dec 1</td>
<td>No Assignments – Thanksgiving Break</td>
<td>Final Paper Due on Dec 8th</td>
</tr>
<tr>
<td>15</td>
<td>Dec 2 – Dec 8</td>
<td>No readings – work on final paper</td>
<td>Final Paper Due on Dec 8th</td>
</tr>
</tbody>
</table>
Course Website – Blackboard Learning Environment
The iSchool uses the Syracuse University’s Blackboard system to facilitate distance learning and main campus courses. The environment is composed of a number of elements that will help you be successful in both your current coursework and your lifelong learning opportunities. To access Blackboard, go to the following URL: http://blackboard.syr.edu. Questions regarding Blackboard should be directed to ilms@syr.edu or Peggy Brown at (315) 443-8144.

Academic Integrity
The academic community of Syracuse University and of the School of Information Studies requires the highest standards of professional ethics and personal integrity from all members of the community. Violations of these standards are violations of a mutual obligation characterized by trust, honesty, and personal honor. As a community, we commit ourselves to standards of academic conduct, impose sanctions against those who violate these standards, and keep appropriate records of violations. The academic integrity statement can be found at: http://supolicies.syr.edu/ethics/acad_integrity.htm.

Disabilities
If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), http://disabilityservices.syr.edu, located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible.

Ownership of Student Work
This course may use course participation and documents created by students for educational purposes. In compliance with the Federal Family Educational Rights and Privacy Act, works in all media produced by students as part of their course participation at Syracuse University may be used for educational purposes, provided that the course syllabus makes clear that such use may occur. It is understood that registration for and continued enrollment in a course where such use of student works is announced constitutes permission by the student. After such a course has been completed, any further use of student works will meet one of the following conditions: (1) the work will be rendered anonymous through the removal of all personal identification of the work’s creator/originator(s); or (2) the creator/originator(s)’ written permission will be secured. As generally accepted practice, honors theses, graduate theses, graduate research projects, dissertations, or other exit projects submitted in partial fulfillment of degree requirements are placed in the library, university archives, or academic departments for public reference.

Additional Course References:


Department of Defense Architecture Framework - DoDAF v 2.02; 2011.
http://cio-ni.defense.gov/sites/dodaf20/


Rybczynski, W. “The Art of Building, or the Building or Art” *Wilson Quarterly, Autumn 92* 16(4) 46-57.


**Federal Government References**


OMB Memorandum M-11-29. CIO Responsibilities, August 2011.


IST 726 Enterprise Architecture – Fall 2013, Online (updated 6/11/13)
United States Congress; Electronic Signatures in Global and National Commerce Act of 2001 (Public Law 106-229).
United States Congress; Federal Information Security Management Act (within the E-Government Act) (Public
Law 107-398).
United States Congress; Paperwork Reduction Act of 1995 (Public Law 104-13).

Enterprise Architecture – Related Organizations

Association of Enterprise Architects (a|EA); www.aeajournal.org
Association of Enterprise Interoperability (AEI); www.aei.org
Enterprise Architecture Community (EAC); www.eacommunity.com
Enterprise Architecture Interest Group (EAIG); www.eaig.org
Institute for Enterprise Architecture Developments (IFEAD); www.enterprise-architecture.info
International Enterprise Architecture Institute; www.internationaleainstitute.org
Journal of Enterprise Architecture (JEA); www.aeajournal.org
National Association of State CIOs (NASCIO) – EA Working Group www.nascio.gov
The Object Modeling Group (OMG) www.omg.org
The Open Group Architecture Framework (TOGAF); www.togaf.com
The Open Group of Enterprise Architects (TOGEA); www.togea.org
Zachman Institute for Framework Advancement; www.zifa.com