# Enterprise Architecture

**BUDT 758E** 

Syllabus

## Instructor:

Dr. Daniel Spar, Deloitte Consulting LLP

This class will have a teaching assistant. Details will be provided.

Additionally, there will be visiting industry experts for guest lectures.

#### **Contact Information:**

Daniel Spar

Email: dspar@rhsmith.umd.edu

o Phone: (202) 302-5472

# **Introduction: Course Overview and Objectives**

Technology strategy has become a critical activity in business today, and enterprise architecture (EA) provides a structured, model-driven, methodology to approach strategic transformations, in both business operations as well as for supporting information systems.

The drivers for an EA project commonly include the need to fix business-technology alignment, to enable a business merger or acquisition to become fully integrated, and to rationalize the portfolio of technology supporting the business.

Enterprise architecture provides structure and rigor to documenting, analyzing and integrating the components of an enterprise, ranging from the business operating model, to the systems design, to the physical technology.

This analysis generally is conducted for both the current state and the future state. Gap analysis is performed between the current state business and the current state systems, as well as between the current and future state of the business operating model. Analysis of this enables development of business and technology transition plans to progress to the desired, and integrated, future state of each.

We will also discuss current industry trends as they relate to these topics. Since Dr. Spar is an adjunct professor who is currently working in industry, the focus of this course will be the application of course principles to real-world situations.

## **Prerequisite**

No prerequisite is assumed for this course; however, a background in information modeling, including UML, is helpful as these concepts can be leveraged in building architecture artifacts.

#### **Textbook**

There are no required textbooks for this course. We will use industry and academic papers and articles.

Course materials will be made available through online postings and links.

The primary material we will leverage online is The Open Group Architecture Framework, Version 9.1, ("TOGAF 9 Online") documentation which is available online at no cost. Links to this and other related materials will be posted on the course website.

# **Learning and Interaction**

This course is based on the philosophy that learning comes from discussing, applying and using relevant information in real-life situations. The ultimate goal of this course is to teach students how to apply the course material to relevant situations within the workplace. Students are encouraged to engage in online discussions and to post ideas in the online forum. Discussion participation will directly affect class participation points.

#### **Discussion Forums**

In order to coincide with this course's goal of frequent discussion of class topics, students will be asked to communicate with each other regularly through the course's discussion forum. Students will be asked to respond to articles, posts, and fellow students' posts on the forum in order to help each other understand course concepts. This method of collaborative learning is similar to the environment students will experience in future jobs, and thus open communication and collaboration on discussion forums is actively encouraged.

## Grading

Final course grades are based on the following criteria:

Assignments	40% (4% each)	
Quiz	10%	
Class Participation	20%	
Final Project	30%	

## Final Project Key Criteria:

- Final projects should leverage all major concepts taught in the course
- Projects will be graded on content, delivery, correctness and adherence to architecture principles taught in the class.

As a graduate level course, highest standards are expected.

# Assignments, Exams, and Deadlines

Assignments: Weekly assignments will be posted in the lesson folders.

In order to receive full credit, students must turn in all assignments by the scheduled due date and time. For this course, the assignments will be posted each week by Monday, and will be due the following Sunday at 11:59pm EST. There are no other due dates for assignments aside from the following Sunday evening as noted. Late work will not be accepted and there will be no opportunity to make up any missed assignments. If you have obligations that conflict with assignment due dates you should inform the instructor and make alternate arrangements to complete the work as far in advance as possible.

One guiz in Week 12 and a final exam in Week 15.

A quiz will be given in class on Monday in week 12. The quiz will be smaller than a typical exam, and will consist entirely of questions derived from the questions posted each week. The purpose of this quiz is to reinforce the key concepts of this course.

The final exam will be given in class in Week 15. This exam will be comprehensive.

Emergencies.

We do understand that emergencies arise and ask that you try to provide us with prompt notice (email, have a friend/classmate contact Daniel Spar at: danspar@umd.edu) if you are experiencing an emergency. We will work to make alternate arrangements for you to make up the material. As necessary, documentation for the emergency may be requested.

## **Academic Integrity**

Any evidence of academic dishonesty will be dealt with according to the rules and regulations of the University of Maryland and the Robert H. Smith School of Business.

You will be required to sign a deliverable affirmation statement on all assignments (team or individual). A deliverable is any assignment, test, quiz, etc. that is submitted to be graded. The affirmation is as follows:

"I have neither given nor received unauthorized aid on this deliverable"

Please include this affirmation on the cover sheet or first page of every deliverable, followed by your name. Your typed name will serve as your signature. For team deliverables please include all of the team members' names. PLEASE NOTE: The deliverable will not be graded without the Deliverable Affirmation.

To avoid purposefully or inadvertently passing the work of another off as your own, please use proper source citations on all deliverables. Please be aware that inclusion of long quotations from other sources, despite their citation, lowers the overall value-add of your paper and this may be taken into account during the grading process.

Additionally, academic integrity covers professional conduct. This means our interactions will be courteous and that everyone will be treated with respect – there is no excuse for incivility and it will not be tolerated.

#### Feedback

You are encouraged to provide the instructor with feedback and constructive criticism about all aspects of the course at any time. We will periodically ask you for anonymous, online feedback during the course in addition to the formal evaluation at the end of the course. Students are encouraged to be forthcoming with all comments, whether positive or constructive, on these evaluations.

#### **Class Schedule**

Pre-class readings will be posted online. Students are expected to complete the assigned preclass readings before the start of each class. The schedule below indicates the *start date* of each week of instruction. Each week will have a corresponding lesson folder on the course website, and all materials for reading, lectures, references, and assignments will be posted there for the week. All assignments will be due the following Sunday by 11:59pm EST.

WEEK	TOPIC	DATE
Week 1	Introduction to Enterprise Architecture	8/24/2015
Week 2	Introduction to Enterprise Architecture (Continued)	8/31/2015
Week 3	Business Architecture	9/14/2015
Week 4	Business Architecture (Continued)	9/21/2015
Week 5	Information Systems Architecture	9/28/2015
Week 4	Applications Architecture	10/05/2015

Week 5	Data Architecture	10/12/2015
Week 8	Technology Architecture	10/19/2015
Week 9	Technology Architecture (Continued)	10/26/2015
Week 10	Transition Planning and Governance	11/02/2015
Week 11	Transition Planning and Governance (Continued)	11/09/2015
Week 12	Quiz and Final Project Overview	11/16/2015
Week 13	Comprehensive Review	11/23/2015
Week 14	Final Project Presentations	11/30/2015
Week 15	Final Exam	12/07/2015

# **Class Schedule: Weekly Course Logistics and Assignment Details**

A primary objective of this course is to introduce you to the structured methods necessary to achieve success on complex projects.

Each week there will be a combination of learning materials and exercises to introduce and reinforce key concepts.

Each week will include the following:

- 1. A brief overview slide deck to explain the objectives and related materials for the week,
- 2. An in-person lecture in designated weeks currently planned to be all weeks but subject to modification. Please note: the in-person dates may be updated and will be discussed in class and posted on-line. Please check the course site before each lecture to ensure knowledge of the class status.
- 3. Reading content, selected from the textbook and online references listed, and
- 4. A weekly assignment.

The weekly assignments will consist of the following:

1. Short questions on the content,

- 2. Small deliverables to give you practice building EA content, and
- 3. An online discussion forum question for class debate.

The class project will consist of the following:

Building a small enterprise architecture deliverable set, using the products you have constructed each week, and framing them with a narrative to describe the EA project mission, the EA drivers, scope and vision, the findings discovered in the EA artifacts, and the business value generated.

#### **Resources:**

The textbook and the online references contain a great deal of information. The TOGAF 9.1 reference is over 1,000 pages and contains information and related content for all of the class questions.

There will be a folder posted each week for "Questions and Answers", where you can post questions any time for help.

Additionally, there will be a teaching assistant to help with the material each week.

Welcome again to the class!