MET CS 783 OL – Spring2 2025

Course Syllabus – Enterprise Architecture

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Textbooks:

- ***Enterprise Architecture as Strategy*** by Jeanne W. Ross, Peter Weill, and David C. Robertson, Harvard Business Press 2006. ISBN: 978-1-59139-839-4. (This textbook can be purchased from Barnes and Noble at Boston University. Text is abbreviated as "EAAS" below.)
- ***Software Architecture Patterns*** by Mark Richards, O'Reilly Media Inc., 2015.
    - (This "report" is a free PDF download from the O'Reilly website. It is abbreviated as "SAPatterns" below: https://www.oreilly.com/library/view/software-architecture-patterns/9781491971437/?_gl=1*ju0a61*_ga*NTI4MjMwMzUzLjE2NzAyNDM4NDA.*_ga_092EL089CH*MTY3MDI0Mzg0MC4xLjEuMTY3MDI0Mzg3Mi4yOC4wLjA.) There is also a download posted within the Blackboard site for the course (in "Class Discussion/Communications from Marcia Yates" forum).
- ***Software Architecture: The Hard Parts*** by Neal Ford, Mark Richards, Pramod Sadalage & Zhamak Dehghani, O'Reilly Media, Inc. 2022. ISBN: 978-1-492-08689-5. (This textbook is abbreviated as "SA:THP" below.) ***IMPORTANT NOTE ON THIS TEXT:*** *This is a fabulous textbook that is very relevant for our course -- and it should help you as a "forever" reference if you intended to become an enterprise architect --* ***but*** *you are only responsible for the critical parts identified in the Outline posted in the "Class Discussion/Communications From..." forum in Blackboard. The textbook's format (it has a single Use Case) may make it difficult to jump into sections without some skimming of the surrounding information. The "Reading" assignments below for SA:THP imply the skimming - or not. The amount of additional reading (hopefully, little) depends on the student's individual learning style and prior technical background.*

Week	Topics	Reading	Assignments
Week 1 (March 11 - March 17) *Module 1 in Blackboard*	Housekeeping and explanation of assignments and Term Project Lecture 1: Introduction to the Course and to Enterprise Architecture Lecture 2: The Operating Model & Alignment with the Business	EAAS: Preface, pp. vii – xi, Chapter 1, Chapter 2, Chapter 3 SAPatterns: Entire report (it's short :)	• *OPTIONAL: Review Module 0 in Blackboard course, take the quizzes (they do not count toward your grade)* • *Review the syllabus; create your personal schedule for the course based on this syllabus – note that the course covers a lot of material, the pace is fast, and*

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Week	Topics	Reading	Assignments
	Introduction to the Term Project and Assignment 1 Syllabus Scavenger Hunt! Lecture 3: The Core Diagram	*Blackboard – read Module 1 content*	*the assignments can be time-consuming!* ***Due by Friday, March 14, if possible:*** **Term Project Deliverable #1 due (Proposal for your project)**
Week 2 (March 18 - March 24) *Module 2 in Blackboard*	IT Governance (overview) Lecture 4: Software Artifacts and Enterprise Architecture Frameworks Lecture 5: Security and Compliance Lecture 6: Stages of Architecture Maturity *Software Architecture: The Hard Parts – summary of the critical parts for the course*	EAAS: Chapter 3 (review), Chapter 4, Chapter 8, pp. 182-186 SA:THP: Preface, Chapters 1, 2, 3, 4 (see note above) *Blackboard – read Module 2 content*	***Due by 6am on Tuesday, March 18:*** **Quiz #1** **Assignment #1** **Late submission of Term Project Deliverable #1 ok** **Note Saturday Solution Session at 9am on March 22nd to cover Assignment #1 (Live Classroom)**
Week 3 (March 25 - March 31) *Module 3 in Blackboard*	Lecture 7: IT Engagement Model Lecture 8: Software Architecture Patterns Lecture 9: "Greenfield" Development versus Legacy Systems Lecture 10: Blockchain	EAAS: Chapters 5 & 6 SA:THP: Chapters 5, 6, 7 (see note above) *Blackboard – read Module 3 content*	***Due by 6am on Tuesday, March 25:*** **Quiz #2** **Assignment #2** **Term Project Deliverable #2** **Note Saturday Solution Session at 9am on March 29th to cover Assignment #2 (Live Classroom)**
Week 4 (April 1 - April 7)	Lecture 11: System Integration & Linking Technologies Lecture 12: ERP Systems	EAAS: Chapter 8 SA:THP: Chapters 8, 9, 10, 11 (see note above)	***Due by 6am on Tuesday, April 1:*** **Quiz #3** **Term Project Deliverable #3**

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Week	Topics	Reading	Assignments
Module 4 in Blackboard	Lecture 13: Big Data Analytics, Data Warehouses/Data Lakes in the EA	*Blackboard: read Module 4 content*	***Note that there is no Saturday Solutions Session for April 5th; we optionally may use that time as office hours for Term Project concerns and questions.***
Week 5 (April 8 - April 14) *Module 5 in Blackboard*	Lecture 14: Outsourcing, Vendor Management, and SLAs Lecture 15: Deployment topics: Private/Public/Hybrid Cloud, Hosting, On-prem Datacenters Lecture 16: DevOps, CI/CD pipelines, Docker	EAAS: Chapter 7 and Chapter 9 SA:THP: Chapters 12, 13, 14, 15 (see note above) *Blackboard: read Module 5 content*	***Due by 6am, Tuesday April 8:*** **Quiz #4** **Assignment #3** **Note Saturday Solution Session at 9am on April 12th to cover Assignment #3 (Live Classroom)**
Week 6 (April 15 - April 21) *Module 6 in Blackboard*	Disruptive Technologies, What's new on the Horizon...Generative AI in the Enterprise Lecture 17: Deploying Your EA: Scaling, Monitoring, and Fault Tolerance Lecture 18: Disaster Recovery and Business Continuity Lecture 19: The Final Lecture: Course Summary and *"So You Want to Be a CIO? -- Building Your Career"*	EAAS: Chapter 8 *Blackboard: read Module 6 content*	***All due by 6am Tuesday, April 15:*** **Quiz #5** **Assignment #4** **Term Project Incremental #4 (final draft)** **Note Saturday Solution Session at 9am on April 19th to cover Assignment #4 (Live Classroom)** **Schedule your Final Exam!**
Week 7 (April 21 - April 28)	Student Presentations Final Exam (you must schedule your exam with the exam service)		***All due by 6am Tuesday, April 22:*** **Quiz #6** **Final versions of Term Project Report & Presentation**

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CLASS POLICIES

PLEASE READ THE FOLLOWING INFORMATION CAREFULLY. IF YOU HAVE QUESTIONS OR CONCERNS, PLEASE DO NOT HESITATE TO ASK YOUR INSTRUCTOR FOR CLARIFICATION.

Office hours: With online classes, we have found it difficult to schedule office hours that suit our varied student schedules. Students are encouraged to contact instructor to schedule a phone call or Zoom session to receive 1:1 feedback or discuss involved questions. Instructor is usually online 15 minutes prior to Live Classroom sessions and students are welcome to ask questions or give comments then. If there is sufficient interest, we can schedule sessions for Term Project questions for the whole class.

Live Classroom Sessions: There are a tremendous number of topics in this course, and the lectures do their best to cover them. Live lecture slides are closely correlated to the Lectures in Blackboard. Live Classroom sessions cover the lectures listed in this syllabus and are scheduled on Tuesday and Thursday evenings from 8pm to 10pm ET. Be forewarned that lectures can cover more topics than the Blackboard lectures, as the slides are updated with each running of the course, and the Blackboard material is only updated every few years.

The content must be 'front-loaded' in this course to ensure students have the information and skills to accomplish the first Assignments and the Term Project deliverables. Because of this, some Live Classroom lectures may need to stretch to 2.5 hours, or an additional session will be scheduled, or the instructor will record some lectures for students to hear at their convenience. Announcements will be made in these situations.

Saturday Solution Sessions: In the online format for this course, we schedule four Saturday morning sessions at 9am ET that cover the solutions to each of the four Assignments that are due on the prior Tuesday morning. Because the solutions are exposed in those sessions, the last possible moment for an Assignment extension is 8:59am ET on Saturday of the week the assignment is due. Like the Live Classroom sessions, students are encouraged to attend the Saturday sessions in person, if possible, but these are also recorded for later viewing.

Snow/weather-related cancellations: This never occurs with online classes. If any Live Classroom must be rescheduled due to an inability to broadcast (e.g., power loss at instructor's residence), every effort will be made to notify the class through email.

Accuracy of Due Dates: This syllabus represents due dates as understood as of its publication (see footer for the date). The most accurate due dates will be reflected in the Blackboard calendar for the course. Instructor will *always* send out a Blackboard email announcement with any changes.

Spring 2 OL: It is imperative that students stay current with work that is due. The Term Project is a serious, graduate student-level project and it **must be approved** by the instructor before starting work. The term goes by QUICKLY. Students who succeed in this course plan out their work from the beginning.

Each student must submit original work done only by the student: **Any paraphrased or directly quoted supporting material from the Internet, textbooks, or any other source including from the instructor's slides or from the Blackboard course materials must be properly cited using**

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APA form. Students may not collaborate with other students on quizzes, assignments, or the Term Project. This is an upper numbered graduate level course; students are expected to submit assignments that incorporate *their* original ideas, not re-hashed/copied ideas from others or copy/paste from other sources without demonstrating original explanation and thinking. **Do not under any circumstances use or cite Wikipedia! It is not reliable.**

Disability accommodations: You must be documented through the University's disability office if you need special accommodations to take this course. The disability office will produce a letter explaining your needs; you must deliver that letter to the instructor at the start of the course if you need accommodations.

Term Project length: Reviewing and grading final term projects takes significant time – at least 3 hours per project/student. **Therefore, there is a page limit of 25 pages for the Term Project report, with font size 10 the smallest font accepted.** Instructor will stop grading after 25 pages. The page limit does not include the slides for your in-class presentation.

Term Project Presentations: It is fun and informative to see what other students have done for their projects! We will schedule student presentations for weeks 6 & 7, and presentations will be listed in the class calendar in Blackboard. Please try to attend the presentations live, or at least listen to the recordings (posted in Blackboard). Experiencing what other students have done is an important learning opportunity for the course. The course remains open for some period after the official end of the course, so you can listen to presentations then if you just feel too pressed for time during the last week+ of class.

Plagiarism policy: Cheating and plagiarism will not be tolerated in any Metropolitan College course. It is each student's responsibility to read and understand the Boston University academic conduct code, which is available here https://www.bu.edu/academics/policies/academic-conduct-code/. All assignments, quizzes, and exams must be the original work of the student whose name is on the assignment. The instructor uses plagiarism detection tools like *TurnItIn* and *SafeAssign* to assess whether information has been copied directly from sources without proper citation, or whether students have copied or purchased papers that have been submitted previously in the course. **Discovery of plagiarism will result in a zero for the assignment.**

Citations: In accord with the above rules on plagiarism, any directly quoted or paraphrased material must have proper citation. Use primary sources, and do not use Wikipedia! Any assignment must also have a standard bibliography. MET College requires APA citation style (please see http://www.apastyle.org/ if you are unfamiliar with it). **Failure to include a bibliography will result in a 25-point loss on the assignment.**

Quizzes: There are six quizzes that are accessed and taken online in Blackboard. Quizzes are due by 6am on the day indicated in the syllabus above. Quiz results cannot be released until all students have taken the quiz. Quizzes are configured so that students may take them multiple times for Final Exam review, but **only the first quiz attempt will be graded.** Note that quiz questions are randomly and automatically selected by Blackboard from a bank of questions for that quiz.

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Exams: The final exam is closed book and cumulative. Students schedule their exam through the BU service provided. The test format is similar to the online quizzes (but no quiz questions are repeated on the Final), plus an essay question. There is no mid-term exam.

Assignments: Assignments are submitted in Blackboard. You must submit to the assignment dropbox. I will do my best to ensure timely feedback. All quizzes and assignments are due by 6am on the day shown in the syllabus. Note that there are separate dropboxes for the Term Project Report and for the Presentation. **If you require an extension in hardship cases, please get in touch with the instructor BEFORE the due date for the assignment.**

Class Discussion posts are encouraged! They are due before the Tuesday deadlines so that your classmates can comment on them; comments receive partial credit if they are high quality.

Grading: Your grade is determined as follows:

- Assignments (the incremental Term Project deliverables are averaged together for the fifth assignment) – 25%
- Class Discussion graded posts – up to 5% extra credit
- Online quizzes – 15%
- EA Term Project Report – 20%
- EA Term Project Presentation – 10%
- Final Exam – 30%