This is a single, concatenated file, suitable for printing or saving as a PDF for offline viewing. Please note that some animations or images may not work.

Course Description

This <u>module</u> is also available as a concatenated page, suitable for printing or saving as a PDF for offline viewing.

Theory and practice of security and quality assurance and testing for each step of the software development cycle. Verification vs. validation. Test case design techniques, test coverage criteria, security development and verification practices, and tools for static and dynamic analysis. Standards. Test-driven development. QA for maintenance and legacy applications. From a project management knowledge perspective, this course covers the methods, tools and techniques associated with the following processes -- Plan Quality, Perform Quality Assurance, and Perform Quality Control.

Technical Notes

The table of contents expands and contracts (+/- sign) and may conceal some pages. To avoid missing content pages, you are advised to use the next/previous page icons in the top right corner of the learning modules.

This course requires you to access files such as word documents, PDFs, and/or media files. These files may open in your browser or be downloaded as files, depending on the settings of your browser.

Learning Objectives

Upon successful completion of this course, you will be prepared to:

- · Manage a Software Quality Assurance function covering all phases of a global product development life cycle
- Play an effective role of a Software Engineering Manager in a context of IEEE CSDP (Certified Software Development Practitioner) with a specific emphasis on organizational policies as guiding principles.
- Solicit, define and scope requirements as part of the product backlog grooming.
- Assess common security threats and establish corresponding deterrents.
- Select an estimation method that is appropriate for a specific phase. Oversee adoption of a consistent methodology to narrow the Cone of Uncertainty.
- Play a role in a peer review verification, request and provide constructive and concise comments.
- Support the Scrum delivery framework and become aware of several agile certification paths.

- Evaluate software development tools (approved, allowed, restricted), while following the Magic Quadrant technique.
- Articulate a strategy for system and unit test leading to continuous integration and delivery.
- Structure a project asset library aiming at single-click navigation to a requested artifact.
- Provide leadership to a process program that is mapped into PMI and/or SEI CMMI as an improvement model.

Instructor

Office Phone: 617-335-6135

Email: <u>elentukh@bu.edu</u>

Alex Elentukh

Office Hours & Questions: You will have ample opportunity for questions during class or through email. In addition, I will be available to stay late after class. Finally, I am available for ad-hoc conference call discussions upon request. Do not be surprised to receive a call from me, as I am always interested to learn what you are thinking.

My name is Alex Elentukh, and I will be your instructor for the course. To give you a little background about myself, during my 25 years professional career I taught various software-engineering courses at Boston and Northeastern University and authored numerous papers on quality assurance and software reliability. Most recently taught the MET CS 473, MET CS 673 and MET CS 633. At EMC, as an Agile coach, I introduced the backlog grooming to improve collaboration between product owners and engineering. As an enterprise architect at Fidelity, I managed the regression-intensive verification used by multiple scrums, cutting the field complaint rate by fifty percent. I also held the positions of QA director at two successful start-ups, Jupiter and Reveal.

Most importantly, I'm here to help - if you have any questions or need anything at all during the course, please don't hesitate to contact me...the most effective way is via email.

Course Resources

There are several books referenced throughout the course. These books are *optional*. You do not need to purchase them. Most of the course concepts are expounded through the class notes comprised of some two hundred pages. You will be also required to search through various on-line resources.



Glenford Myers is an American computer scientist, entrepreneur, and author. He founded two successful high-tech companies, authored eight textbooks in the computer sciences, and made important contributions in microprocessor architecture.

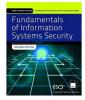


Steve McConnell, (2006) Software Estimation: Demystifying the Black Art. Redmond, WA: Microsoft Press, ISBN: 0735605351. Steve McConnell is a well-known industry practitioner, Chief Software Engineer at Construx. Software Development magazine named Steve one of the three most influential people in software industry along with Bill Gates and Linus Torvalds. Steve's book on estimation is available in electronic form and could be delivered instantly.





David Platt teaches User Experience Engineering at Harvard University Extension School and at companies all over the world. He's the author of 12 programming books, including Why Software Sucks (Addison-Wesley, 2006) and Introducing Microsoft .NET (Microsoft Press, 2003). Microsoft named him a Software Legend in 2002.



"Fundamentals of Information Systems Security", David Kim and Michael Solomon, ISBN-13: 978-1284031621 . David Kim is the president of Security Evolution Inc (SEI) provides consulting services around the world.



Jez Humble is a principle consultant at Thoughtworks helping organizations deliver high quality software fast and reliably. This groundbreaking book sets out the principles and technical practices enabling rapid, incremental software release. It is a part of the sea change that brought about a culture of continuous delivery.



Boston University Library Information

Boston University has created a set of videos to help orient you to the online resources at your disposal. An introduction to the series is below:

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All of the videos in the series are available on the <u>Online Library Resources</u> page, which is also accessible from the Campus Bookmarks section of your Online Campus Dashboard. Please feel free to make use of them.

As Boston University students, you have full access to the BU Library. From any computer, you can gain access to anything at the library that is electronically formatted. To connect to the library, use the link <u>http://www.bu.edu/library</u>. You may use the library's content whether you are connected through your online course or not, by confirming your status as a BU community member using your Kerberos password.

Once in the library system, you can use the links under "Resources" and "Collections" to find databases, eJournals, and eBooks, as well as search the library by subject. Some other useful links follow:

Go to http://www.bu.edu/library/research/collections to access eBooks and eJournals directly.

If you have questions about library resources, go to <u>http://www.bu.edu/library/help/ask-a-librarian</u> to email the library or use the live-chat feature.

To locate course eReserves, go to http://www.bu.edu/library/services/reserves.

Please note that you are not to post attachments of the required or other readings in the water cooler or other areas of the course, as it is an infringement on copyright laws and department policy. All students have access to the library system and will need to develop research skills that include how to find articles through library systems and databases.

Please Note

SMARTHINKING may be used only for current Boston University online courses and career services. Use of this service for purposes other than current coursework or career services may result in deactivation of your SMARTHINKING account.

Course Grading Information

Grade Weighting & Grade Conversion

The following table summarizes the five kinds of graded items along with their weight.



6/20/2018

Syllabus

Class Engagement	10%
Quizzes	10%
Assignments	20%
Term Project	30%
Final Exam	30%

The following table details the translation on a numerical grade to a letter grade.

Letter Grade	Numerical Grade
A	>=95 - <=100
A-	>=90 - <95
B+	>=85 - <90
В	>=80 - <85
В-	>=77 - <80
C+	>=74 - <77
С	>=70 - <74
C-	>=65 - <70

Class Engagement:

<u>Class Discussions</u>: A large part of the overall learning experience is gained through discussions and participation amongst the class. The intent here is to encourage a meaningful participation during live sessions and through the discussion board. A typical lecture consists of two parts. The first part covers new material. Second part details each assignment and every quiz that cover new material. Class discussions are optional, but students are encouraged to post comments toward several predefined topics. All posts, along with an abundance of references, are propagated from previous classes to supplement the body of knowledge for the whole course.

<u>Peer Reviews</u>: All in-process artifacts (e.g. requirements and test cases), as well as the final deliverable (code), shall be peer reviewed. Providing constructive and concise comments is a part of the defined process elaborated in the

class. Each student actively participates in peer reviews, submits a predefined deliverable and incorporates changes suggested by peers.

<u>Attendance Policy</u>: Attendance is optional but encouraged at Live Classroom sessions. Attendance becomes a factor in overall Class Engagement grade. You are responsible for all material discussed in class.

Quizzes

Quizzes in this course are an important method to learn new material. Quizzes complement other methods, assignments, discussions, and term project. Quizzes offer a slightly different path and angle toward the same course concepts. You have multiple attempts to take a quiz and the mean score will go toward the grade. Yes & No answers bear no judgment. They are impersonal, which is quite different from assignments where, in many cases, there is no right or wrong answer.

Assignments

Assignments encourage you to extrapolate from the course material and from your own experiences. Researching a topic and responding questions about grey-area-scenarios will force you to think independently. You should time box your research. These assignments illustrate key points, and exploring too many details is bound to deviate from the big picture focus.

Term Project

The purpose of the term project is to follow key phases of software product development. It is a chance to pilot and adopt the best practices covered in the course. In today's environment, collaboration is imperative as it drives the overall effectiveness of a software project. Peer reviews is the critical activity that enables team members to collaborate through finding defects in each other's work products. After participating in a term project in a controlled environment, you will be able to apply your skills later to a real situation. You are encouraged to benefit from several dozen projects completed at previous classes.

Final Exam

You will have three hours to complete the final exam; there should be plenty of time. The final exam will be open book, open notes.

- 1. Short answers: A combination of multiple choices/answers based on quizzes from course modules.
- 2. **Essays:** Short essays/responses which will focus on in-depth lecture discussions and on practical knowledge gained throughout Term Project.

You should expect no surprises on your final exam, as it includes no questions that are not covered during the class.

The last question on your final exam is as follows. As one of the goals of this course is for you to adopt at your day job - some techniques we covered in the class. Which of the best practices from the course do you plan to adopt?

Here is one of the responses.

While there are many elements of this course that I expect to directly apply to my current job, there are two that stand out more than others. Those two are peer reviews and estimation techniques. My company performs peer reviews for functional specifications as well as technical designs, but we do not conduct code reviews. I think if we were to implement a static analysis of team code, we would detect potential defects sooner. We would also have a chance to suggest more uniform coding best practices so there would be a greater consistency of code among developers. It would also aid in cross-training, in which my team is severely lacking.

Here is another response.

The tool evaluation matrix and magic quadrant will be extremely valuable to me in the future as I find that the organization I work for tends to acquire a multitude of tools which do the same exact thing and it needs to be revised in order to standardize their use to become more efficient and save money at the same time. Thank you for the toolkit you have provided throughout the semester!

Academic Integrity

Academic conduct in general, and MET College rule in particular, require that all references and uses of the work of others must be clearly cited. All instances of plagiarism must be reported to the College for action. For the full text of the academic conduct code, please check

http://www.bu.edu/met/for-students/met-policies-procedures-resources/academic-conduct-code/

Evaluation Criteria and Grading Rubric

In general, the <u>explanation</u> for letter grades is provided by the Boston University Office of the University Registrar.

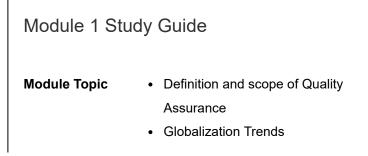
	D	C-	C+	B-	B+	А
Clarity	Disorganize understand	d or hard to	Satisfactory, but some parts of the submission are disorganized or hard to understand	Generally organized and clear	Very clear, organized, and persuasive presentation of ideas and designs	Exceptionally clear, organized, and persuasive presentation of ideas and designs
Technical Soundness	Little technic understandi		Some technical	Overall technical	Very good overall	Excellent, deep technical

2018			Syl	labus		
	insight into,	material	understanding of material	understanding of much material	technical understanding of material, with some real depth	understanding of material and its interrelationships
Thoroughness and Coverage	Hardly cove major releva	rs any of the ant issues	Covers some of the major relevant issues	Reasonable coverage of the major relevant areas	Thorough coverage of almost all of the major relevant issues	Exceptionally thorough coverage of all major relevant issues
Relevance	Mostly unfocused	Focus is off topic or on insubstantial or secondary issues	Only some content is meaningful and on topic	Most or all content is reasonably meaningful and on-topic	All content is reasonably meaningful and on-topic	All content is entirely relevant and meaningful
Utilization of Resources			Some relevant use of notes, text(s), web, or tools, with mostly correct details and applicability	Fairly good use of notes, text(s), web, and tools, with correct details and applicability	Very good use of notes, text(s), web, and tools, with correct details and applicability	Excellent use of notes, text(s), web, and tools with entirely correct details and applicability

Study Guide

The following schedule is tentative, and is a subject to change according to the progress of the class and the feedback from students. It covers six modules with one lecture per module.

(*) designates optional activity contributing to Class Engagement.



Reading References:	 Requirements Engineering Engineering Management Module 1 Course Notes Karl Wiegers Pivotal tutorial Git tutorial IEEE CSDP BOK 	Syllabus
Delleverables due date:	Tuesday, January 23, 6:00 AM ET	
Assessments:	Quiz 1 due date	
Assignments:	 Pre-class Student Intro completed in Google Forms 	
	Individual Assignments:	
	 A 1 "Provide alternative definitions" A 2 "Improve one requirement" A 3 "Benchmark Grooming process" A 4 "Motivation Principle" 	
Term Project:	 Register with Pivotal Create GIT account Propose Project Scope Propose team's composition 	
Class Discussions:	 Introduce yourself and welcome other students Compare Company Policies of Google and GM Document a Policy for your Project 	

All Discussions deliverables due

Live Course Lectures: Tuesday, January

Classroom: 16, 9-10:00 PM ET

Assignments & Quizzes: Thursday, January 18, 9-10:00 PM ET

Module 2 Study Guide				
Module Topic	 Software Configuration Management (SCM) Estimation 			
Reading	Module 2 Course Notes			
References:	GitHub tutorial			
	Steve McConnell			
	• Section 4 "Cone"			
	 Section 11 "Analogy" 			
	 Section 12.3 "Story Points 			
	Foints			
Delieverables due date:	Tuesday, January 30, 6:00 AM ET			
Assessments:	Quiz 2 due date			
Assignments:	 A1 "Analyze GIT's branching & merging" A2 "Select estimation strategy" A3 "Select the Best PM" 			
	All Assignments deliverables due date			
Term Project:	Document Personas			
	Develop Requirements in			
	Pivotal			
	Start Coding			
	All Term Project deliverables due date			
Class Discussions:	• Comment on a paper "The Art of Changing the History", see			

10/24

Assignment 2, Question 2

• Respond a common question, while teaching estimation class

All Discussions due date

Live Course Lectures: Tuesday, January

Classroom: 23, 9-10:00 PM ET

Assignments & Quizzes: Thursday, January 25, 9-10:00 PM ET

Module 3 Study Guide

Module Topic	AgileStatic Testing
Reading References: Delieverables	 Module 3 Course Notes Scrum Guide HBS Case, Jharna SW Tuesday, February 6, 6:00 AM ET
due date: Assessments:	Quiz 3 due date
Assignments:	 A1 "Sequence Stories" A2 "Analyze Velocities" A3 " Select Agile adoption strategy based on Jharna case A4 "Write critical comments in a predefined format"
Term Project:	 All Assignments deliverables due date Provide Estimation record Compile CI List
	All Term Project deliverables due date

18		
	Class Discussion:	 Give a hand to a Moderator in a contentious peer review All Discussions due date
	Live Classroom:	Course Lectures: Tuesday, January 30, 9-10:00 PM ET
		Assignments & Quizzes: Thursday, February 1, 9-10:00 PM ET
	Module 4 S	tudy Guide
	Module Topic	 IS Security Elements of Software Design Common Tools Supporting Common Process
	Reading References:	Module 4 Course NotesDavid KimEric Braude, Ch. 16
	Delieverables due date:	February 13, 6:00 AM ET
	Assessments:	Quiz 4 due date
	Assignments:	 A1 "Arrive at a decision based on Cost Of Delay" A2 "Position 18 software tools into 9 categories" A3 "Justify an appropriate SSO

All Assignments deliverables due date

(Single Sign On) strategy

including Kerberos protocol (*)"

- Term Project: Document Selected Use Cases
 - Converge on a Components
 Interaction diagram

12/24

	Document State Transitions
	All Term Project deliverables due date
Class	How to manage a repository of
Discussion:	best coding practices
	Should Ed Snowden be
	pardoned?
	All Discussions due date
Live	Course Lectures: Tuesday, February
Classroom:	6, 9-10:00 PM ET
	Assignments & Quizzes: Thursday,
	February 8, 9-10:00 PM ET

Module 5 Study Guide			
Module Topic	System TestUnit TestContinuous Delivery		
Reading References:	Module 5 Course NotesGlenford MyersJez Humble		
Delieverables due date:	February 20, 6:00 AM ET		
Assessments:	Quiz 5 due date		
Assignments:	 A1 "Analyze architecture of a test case repository" A2 "Advance test cases from release into regression" A3 "Outline Test Cases" A4 "Develop an Argument" 		

https://onlinecampus.bu.edu/bbcswebdav/pid-5599620-dt-content-rid-20286854_1/courses/18sprgmetcs633_01/course/syllabus/allpages.htm

	 A5 "Explain how SOA facilitates CD"
	All Assignments deliverables due date
Term Project:	Transform mock-ups into
	wireframes
	Complete Coding
	All Term Project deliverables due date
Class	Link two diverse notions from
Discussion:	Andy Grove and Jez Humble
	All Discussions due date
Live	Course Lectures: Tuesday, February
Classroom:	13, 9-10:00 PM ET
	Assignments & Quizzes: Thursday,
	February 15, 9-10:00 PM ET
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Module 6 Study Guide		
Module Topic	 Quality Assurance Process Improvement Course review in preparation to Final Exam 	
Reading References:	Module 6 Course NotesCMMI, version 1.3ISO 9001 2008	
Delieverables due date:	February 27, 6:00 AM ET	
Assessments:	Quiz 6 (*) due date	
Assignments:	 A1 "Spread features evenly across t-shirt sizes" (*) 	

	A2 "Match Test Cases with	
	Defects" (*)	
	A3 "Forecast Defects" (*)	
	A4 "SQA Application of ML" (*)	
	All Assignments deliverables due date	
Term Project:	Develop test cases in a	
	standard format	
	Reduce data-driven	
	combinations using Allpairs	
	All Term Project deliverables due date	
Class	Outline a path toward an	
Discussion:	effective adoption of a new	
	process	
	All Discussions due date	
Live	Course Lectures: Tuesday, February	
Classroom:	20, 9-10:00 PM ET	
	Assignments & Quizzes: Thursday,	
	February 22, 9-10:00 PM ET	
	Q&A: Tuesday, February 27, 9-10:00 PM ET	

Final Exam Details

The Final Exam is a proctored exam available from **February 28 at 8:00 AM ET to March 3 at 11:59 PM ET**. The Computer Science department requires that all final exams be proctored.

The exam is a three-hour open-book/open-notes exam consisting of multiple choice and multiple answer questions. It will only be accessible during the final exam period. You can access it from either the Assessments section of the course or from the Final Exam module on the home page. Your proctor will enter the password to start the exam.

You will receive a technical support hotline number before the start of the exam. Please bring this number with you to the exam.

Academic Conduct Policy

Please visit Metropolitan College's website for the full text of the department's Academic Conduct Code.

A Definition of Plagiarism

"The academic counterpart of the bank embezzler and of the manufacturer who mislabels products is the plagiarist: the student or scholar who leads readers to believe that what they are reading is the original work of the writer when it is not. If it could be assumed that the distinction between plagiarism and honest use of sources is perfectly clear in everyone's mind, there would be no need for the explanation that follows; merely the warning with which this definition concludes would be enough. But it is apparent that sometimes people of goodwill draw the suspicion of guilt upon themselves (and, indeed, are guilty) simply because they are not aware of the illegitimacy of certain kinds of "borrowing" and of the procedures for correct identification of materials other than those gained through independent research and reflection."

"The spectrum is a wide one. At one end there is a word-for-word copying of another's writing without enclosing the copied passage in quotation marks and identifying it in a footnote, both of which are necessary. (This includes, of course, the copying of all or any part of another student's paper.) It hardly seems possible that anyone of college age or more could do that without clear intent to deceive. At the other end there is the almost casual slipping in of a particularly apt term which one has come across in reading and which so aptly expresses one's opinion that one is tempted to make it personal property."

"Between these poles there are degrees and degrees, but they may be roughly placed in two groups. Close to outright and blatant deceit-but more the result, perhaps, of laziness than of bad intent-is the patching together of random jottings made in the course of reading, generally without careful identification of their source, and then woven into the text, so that the result is a mosaic of other people's ideas and words, the writer's sole contribution being the cement to hold the pieces together. Indicative of more effort and, for that reason, somewhat closer to honest, though still dishonest, is the paraphrase, and abbreviated (and often skillfully prepared) restatement of someone else's analysis or conclusion, without acknowledgment that another person's text has been the basis for the recapitulation."

The paragraphs above are from H. Martin and R. Ohmann, *The Logic and Rhetoric of Exposition, Revised Edition.* Copyright 1963, Holt, Rinehart and Winston.

Academic Conduct Code

I. Philosophy of Discipline

The objective of Boston University in enforcing academic rules is to promote a community atmosphere in which learning can best take place. Such an atmosphere can be maintained only so long as every student believes that his or her academic competence is being judged fairly and that he or she will not be put at a disadvantage because of someone else's dishonesty. Penalties should be carefully determined so as to be no

more and no less than required to maintain the desired atmosphere. In defining violations of this code, the intent is to protect the integrity of the educational process.

II. Academic Misconduct

Academic misconduct is conduct by which a student misrepresents his or her academic accomplishments, or impedes other students' opportunities of being judged fairly for their academic work. Knowingly allowing others to represent your work as their own is as serious an offense as submitting another's work as your own.

III. Violations of this Code

Violations of this code comprise attempts to be dishonest or deceptive in the performance of academic work in or out of the classroom, alterations of academic records, alterations of official data on paper or electronic resumes, or unauthorized collaboration with another student or students. Violations include, but are not limited to:

- A. **Cheating on examination**. Any attempt by a student to alter his or her performance on an examination in violation of that examination's stated or commonly understood ground rules.
- B. Plagiarism. Representing the work of another as one's own. Plagiarism includes but is not limited to the following: copying the answers of another student on an examination, copying or restating the work or ideas of another person or persons in any oral or written work (printed or electronic) without citing the appropriate source, and collaborating with someone else in an academic endeavor without acknowledging his or her contribution. Plagiarism can consist of acts of commission-appropriating the words or ideas of another-or omission failing to acknowledge/document/credit the source or creator of words or ideas (see below for a detailed definition of plagiarism). It also includes colluding with someone else in an academic endeavor without acknowledging his or her contribution, using audio or video footage that comes from another source (including work done by another student) without permission and acknowledgement of that source.
- C. **Misrepresentation or falsification of data** presented for surveys, experiments, reports, etc., which includes but is not limited to: citing authors that do not exist; citing interviews that never took place, or field work that was not completed.
- D. **Theft of an examination**. Stealing or otherwise discovering and/or making known to others the contents of an examination that has not yet been administered.
- E. **Unauthorized communication during examinations**. Any unauthorized communication may be considered prima facie evidence of cheating.
- F. Knowingly allowing another student to represent your work as his or her own. This includes providing a copy of your paper or laboratory report to another student without the explicit permission of the instructor(s).
- G. Forgery, alteration, or knowing misuse of graded examinations, quizzes, grade lists, or official records of documents, including but not limited to transcripts from any institution, letters of recommendation, degree certificates, examinations, quizzes, or other work after submission.
- H. Theft or destruction of examinations or papers after submission.
- I. Submitting the same work in more than one course without the consent of instructors.

- J. Altering or destroying another student's work or records, altering records of any kind, removing materials from libraries or offices without consent, or in any way interfering with the work of others so as to impede their academic performance.
- K. Violation of the rules governing teamwork. Unless the instructor of a course otherwise specifically provides instructions to the contrary, the following rules apply to teamwork: 1. No team member shall intentionally restrict or inhibit another team member's access to team meetings, team work-in-progress, or other team activities without the express authorization of the instructor. 2. All team members shall be held responsible for the content of all teamwork submitted for evaluation as if each team member had individually submitted the entire work product of their team as their own work.
- L. Failure to sit in a specifically assigned seat during examinations.
- M. Conduct in a professional field assignment that violates the policies and regulations of the host school or agency.
- N. Conduct in violation of public law occurring outside the University that directly affects the academic and professional status of the student, after civil authorities have imposed sanctions.
- O. Attempting improperly to influence the award of any credit, grade, or honor.
- P. Intentionally making false statements to the Academic Conduct Committee or intentionally presenting false information to the Committee.
- Q. Failure to comply with the sanctions imposed under the authority of this code.

Important Message on Final Exams

Dear Boston University Computer Science Online Student,

As part of our ongoing efforts to maintain the high academic standard of all Boston University programs, including our online MSCIS degree program, the Computer Science Department at Boston University's Metropolitan College requires that each of the online courses includes a proctored final examination.

By requiring proctored finals, we are ensuring the excellence and fairness of our program. The final exam is administered online, and the access will be available at the exam sites.

Specific information regarding final-exam scheduling will be provided approximately two weeks into the course. This early notification is being given so that you will have enough time to plan for where you will take the final exam.

I know that you recognize the value of your Boston University degree and that you will support the efforts of the University to maintain the highest standards in our online degree program.

Thank you very much for your support with this important issue.

Regards,

Professor Lou Chitkushev, Ph.D. Associate Dean for Academic Affairs Boston University Metropolitan College

Microsoft Imagine for Academic Institutions

Metropolitan College is a member of Microsoft Imagine for Academic Institutions (formerly DreamSpark), a Microsoft program that supports technical education by providing access to Microsoft software for learning, teaching, and research purposes. Our membership allows faculty and students currently enrolled in MET courses to obtain certain Microsoft products free of charge. All MET students are granted access to download the software for the duration of their study at MET College.

FAQ and basic information are at: http://www.bu.edu/metit/hw-and-sw/msdn-academic-alliance-software-center/.

Who's Who: Roles and Responsibilities

You will meet many BU people in this course and program. Some of these people you will meet online, and some you will communicate with by email and telephone. There are many people behind the scenes, too, including instructional designers, faculty who assist with course preparation, and video and animation specialists.

People in Your Online Course in Addition to Your Fellow Students

Your Facilitator. Our classes are divided into small groups, and each group has its own facilitator. We carefully select and train our facilitators for their expertise in the subject matter and their excellence in teaching. Your facilitator is responsible for stimulating discussions in pedagogically useful areas, for answering your questions, and for grading homework assignments, discussions, term projects, and any manually graded quiz or final-exam questions. If you ask your facilitator a question by email, you should get a response within 24 hours, and usually faster. If you need a question answered urgently, post your question to one of the urgent help topics, where everyone can see it and answer it.

Your Professor. The professor for your course has primary responsibility for the course. If you have any questions that your facilitator doesn't answer quickly and to your satisfaction, then send your professor an email in the course, with a cc to your facilitator so that your facilitator is aware of your question and your professor's response.

Your Faculty and Student Support Administrator, Jeff Behn. Jeff is here to ensure you have a positive online experience. You will receive emails and announcements from him throughout the semester. Jeff represents Boston University's university services and works for the Office of Distance Education. He prepares students for milestones such as course launch, final exams, and course evaluations. He is a resource to both students and faculty. For example, he can direct your university questions and concerns to the appropriate party. He also handles general questions regarding Online Campus functionality for students, faculty, and facilitators, but he does not provide tech support. He is enrolled in all classes and can be contacted within the course through Online Campus email as it is running. You can also contact him by external email at jeffbehn@bu.edu or call (617) 358-1985.

People Not in Your Online Course

Although you will not normally encounter the following people in your online course, they are central to the program. You may receive emails or phone calls from them, and you should feel free to contact them.

Your Computer Science Department Online Program Coordinator, Peter Mirza. Peter administers the academic aspects of the program, including admissions and registration. You can ask him questions about the program,

registration, course offerings, graduation, or any other program-related topic. He can be reached at <u>metcsol@bu.edu</u> or (617) 353-2566.

Your Computer Science Department Program Manager, Kim Richards. Kim is responsible for administering most aspects of the Computer Science Department. You can reach Kim at <u>kimrich@bu.edu</u> or (617) 353-2566.

Andrew Gorlin, Academic Advisor. Reviews requests for transfer credits and waivers. Advises students on which courses to take to meet their career goals. You can reach Andrew at <u>asgorlin@bu.edu</u>, or (617)-353-2566.

Professor Anatoly Temkin, Computer Science Department Chairman. You can reach Professor Temkin at <u>temkin@bu.edu</u> or at 617-353-2566.

Professor Lou T. Chitkushev, Associate Dean for Academic Affairs, Metropolitan College. Dr. Chitkushev is responsible for the academic programs of Metropolitan College. Contact Professor Chitkushev with any issues that you feel have not been addressed adequately. The customary issue-escalation sequence after your course facilitator and course faculty is Professor Temkin, and then Professor Chitkushev.

Professor Tanya Zlateva, Metropolitan College Dean Dr. Zlateva is responsible for the quality of all the academic programs at Boston University Metropolitan College.

Disability Services

In accordance with University policy, every effort will be made to accommodate unique and special needs of students with respect to speech, hearing, vision, or other disabilities. Any student who feels he or she may need an accommodation for a documented disability should contact the <u>Office of Disability Services</u> at (617) 353-3658 or at <u>access@bu.edu</u> for review and approval of accommodation requests.

Netiquette

The Office of Distance Education has produced a netiquette guide to help you understand the potential impact of your communication style.

Before posting to any discussion forum, sending email, or participating in any course or public area, please consider the following:



Ask Yourself...

- How would I say this in a face-to-face classroom or if writing for a newspaper, public blog, or wiki?
- How would I feel if I were the reader?
- How might my comment impact others?
- Am I being respectful?

• Is this the appropriate area or forum to post what I have to say?

Writing

When you are writing, please follow these rules:

- Stay polite and positive in your communications. You can and should disagree and participate in discussions with vigor; however, when able, be constructive with your comments.
- Proofread your comments before you post them. Remember that your comments are permanent.
- **Pay attention to your tone.** Without the benefit of facial expressions and body language your intended tone or the meaning of the message can be misconstrued.
- Be thoughtful and remember that classmates' experience levels may vary. You may want to include background information that is not obvious to all readers.
- Stay on message. When adding to existing messages, try to maintain the theme of the comments previously posted. If you want to change the topic, simply start another thread rather than disrupt the current conversation.
- When appropriate, cite sources. When referencing the work or opinions of others, make sure to use correct citations.

Reading

When you are reading your peers' communication, consider the following:

- **Respect people's privacy.** Don't assume that information shared with you is public; your peers may not want personal information shared. Please check with them before sharing their information.
- **Be forgiving of other students' and instructors' mistakes.** There are many reasons for typos and misinterpretations. Be gracious and forgive other's mistakes or privately point them out politely.
- If a comment upsets or offends you, reread it and/or take some time before responding.

Important Note

Don't hesitate to let your instructor or your faculty and student support administrator know if you feel others are inappropriately commenting in any forum.

All Boston University students are required to follow academic and behavioral conduct codes. Failure to comply with these conduct codes may result in disciplinary action.

Registration Information and Important Dates

View the drop dates for your course.

Withdraw or drop your course.

- If you are dropping down to zero credits for a semester, please contact your college or academic department.
- Nonparticipation in your online course does not constitute a withdrawal from the class.
- If you are unable to drop yourself on student link please contact your college or academic department.

Technical Support

Experiencing issues with BU websites or Blackboard?

It may be a system-wide problem. Check the BU Information Services & Technology (IS&T) <u>news</u> page for announcements.

Boston University technical support is available via email (<u>ithelp@bu.edu</u>), the <u>support form</u>, and phone (888-243-4596). Please note that the IT Help Center has multiple locations. All locations can be reached through the previously mentioned methods. For IT Help Center hours of operation please visit their <u>contact page</u>. For other times, you may still submit a support request via email, phone, or the support form, but your question won't receive a response until the following day. If you aren't calling, it is highly recommended that you submit your support request via the technical-support form as this provides the IS&T Help Center with the best information in order to resolve your issue as quickly as possible.

Examples of issues you might want to request support for include the following:

- · Problems viewing or listening to sound or video files
- Problems accessing internal messages
- Problems viewing or posting comments
- · Problems attaching or uploading files for assignments or discussions
- · Problems accessing or submitting an assessment

To ensure the fastest possible response, please fill out the online form using the link below:

IT Help Center Support

888-243-4596 or 617-353-4357 or Web

Check your open tickets using **BU's ticketing system**.

Navigating Courses

For best results when navigating courses, it is recommended that you use the Mozilla Firefox browser.

The Table of Contents may contain folders. These folders open and close (+ and – signs) and may conceal some pages. To avoid missing content pages, you are advised to use the next- and previous-page buttons (and icons) in the top-right corner of the learning content.

Please also familiarize yourself with the navigation tools, as shown below; these allow you to show and hide both the Course Menu and the Table of Contents on the left. This will be helpful for freeing up screen space when moving through the weekly lecture materials.

Navigation tools for the Table of Contents are shown in the image below:



Clicking on the space between the Course Menu and the Table of Contents allows you to show or hide the Course Menu on the left:

Home Page	Hide Course Menu Bio
Announcements	3. Resources

Web Resources/Browser Plug-Ins

To view certain media elements in this course, you will need to have several browser plug-in applications installed on your computer. See the Course Resources page in the syllabus of each individual course for other specific software requirements.

- Check your computer's compatibility by reviewing Blackboard's System Requirements
- Check your browser settings with Blackboard's Connection Test
- Download most recent version of <u>Adobe Flash Player</u>
- Download most recent version of <u>Adobe Acrobat Reader</u>

How to Clear Your Browser Cache

The IT Help Center recommends that you periodically <u>clear your browser cache</u> to ensure that you are viewing the most current content, particularly after course or system updates.

This page is also found within the "How to..." section of the <u>online documentation</u>, which contains a list of some of the most common tasks in Blackboard Learn.

Boston University Metropolitan College