Syllabus

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.

Description

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

MET CS 300

Introduction to Software Development

This course introduces basic concepts in discrete mathematics, computer systems and programming that are necessary for modern computing systems. It also develops analytic and logical thinking and prepares students to take graduate-level courses in software development degree. This course first reviews the basic concepts in discrete mathematics including logic, sets, functions, relations and combinatorics. Then it discusses the fundamental concepts in computer systems such as computer organization, basic OS concepts, CPU scheduling, memory management, process management and synchronization. Concurrently with the above mathematics and systems studies, programming concepts are introduced and practiced throughout the whole course using Python.

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

The course is designed to prepare students without a technical background in computer science to succeed in graduate courses in the Master of Science in Software Development. Students often ask how completion of the course relates to acceptance into these graduate programs. The department policy is as follows:

"In making the decision regarding matriculating a student, the Admissions Committee considers the student's prior academic record and any relevant experience. The Admissions Committee may require some applicants to take CS 300 to better prepare for graduate study in Software Development before making a final matriculation decision. For students who complete CS 300 the Committee also considers each student's performance in each of the areas of CS 300, such as discrete math, computer systems and programming. If a student has demonstrated that they are ready for graduate study in *each* of these areas, as demonstrated by a combination of prior coursework, professional experience, and their performance in CS 300, then the Admissions Committee will matriculate them into the MSSD program. Simply passing CS 300 does not assure matriculation, though excellent performance in all areas of CS 300 will earn an applicant matriculation into the program."

For students coming from other programs, this course is a technically oriented introductory survey of modern computing system.

Course Objectives

Upon completion of this class, students are expected to:

For Discrete Math:

- Explain the basic concepts of logic, and solve mathematical problems that involve the laws of logic and the rules of inference.
- Explain the basic concepts of sets, and solve mathematical problems that involve sets and subsets, set operations and laws of set theory
- Explain the basic concepts of combinatorics, and solve mathematical problems that involve permutations and combinations.
- Explain the basic concepts of functions and relations, and solve mathematical problems that involve
 one-to-one, onto functions and function composition, the product sets and relations, equivalence
 relations and partitions.

For Computer Systems:

- Convert numbers between binary, decimal and hexadecimal formats, and explain how basic data types (such as integer, real number, character) are represented in the machine.
- Explain how source program are compiled/interpreted, interpreted executed, including the instruction execution cycle and the role of interrupts.
- Identify the he basic components in a computer system. Explain how multiprocessor/multicore CPU
 affect the system performance. Explain the storage hierarchy and how caching is applied between
 different layers in the hierarchy.
- Explain basic concepts of an OS. Explain OS kernel and basic protection mechanisms implemented in an OS.

- Describe the process model and basic operations.
- · Explain basic CPU scheduling algorithms in an OS.
- Identify the synchronization issues and describe basic solutions.
- · Explain virtual address space and the paging scheme.
- Describe basic components and features of distributed systems and networks.

For Programming:

- · Describe the basic concepts of programming.
- Explain how algorithms are developed and implemented in high level languages.
- Design, write, and debug python programs that use sequence, selection and repetition statements, primitive data types, strings, lists, tuples and that do I/O and file manipulation.
- Decompose the program into functions and modules
- Explain and apply basic object oriented concepts including classes, objects and inheritance.
- · Design, write and debug basic GUI programs.

Course Organization

This course is 7 weeks long: 6 weeks of content, and 1 week for the final exam. Each of 6 weeks includes:

- · reading assignments
- · online content
- · review questions
- · graded assignments
- · self-test or quiz
- · Possibly one discussion question as extra credit

Each assignment is due in 1 week.

The study guide, which precedes each module, lists specific due dates. Assignments and quizzes are due at 6am ET each Tuesday. Review questions and math assignments are optional, but strongly encouraged. The review questions are very similar to the quiz questions. Review questions may be answered as many times as you like, while quizzes are timed and may be taken only once. Math assignment solutions are provided in videos labeled "echo 360" Solutions to information technology assignments and quizzes will be provided after they are graded.

You will see "blocks" of content in the online material that are labeled "Advanced Content." We have found that some students like additional material beyond what is formally part of the course. Hence, we are in the process of adding such content. You are not responsible for advanced content on the quizzes, assignments, or final exam.

Instructor



I am a IT manger focusing on project management and corporate strategy with over 20 years of experience in software application development projects. I have expertise in managing Web application projects in particular Web portals. With strong consulting and analytical knowledge from various industries including government, telecommunication, and insurance I am able to bring practical experience and useful anecdotes to share in my teaching. I have experience as a consultant for IBM Global Services Division (based in New York City) dealing with strategy and IT services and management for a variety of organizations – small and large – in the academic, government, and business worlds.

At BU MET CS program, I have lectured in CS200, CS401 and have been part of many Maters level classes. I hold a B.S in Information and Computer Science from University of California at Irvine (UCI) and a Masters from Boston University.

Additional Course Developers



Eric Braude, Ph.D.

Eric Braude received his Ph.D. from Columbia University in mathematics and Master's in Computer Science from the University of Miami. He taught at CUNY and Penn State, followed by twelve years in government and industry as a software engineer, scientist, and manager. He is an Associate Professor of Computer Science at Boston University's Metropolitan College where he has at times held the chairmanship and the acting associate deanship. His research concerns reliable program construction. Eric has written, co-written, or edited six books, including "Software Engineering" and "Software Design."

Professor Braude's website



Anatoly Temkin, Ph.D.

Dr. Anatoly Temkin has been a BU faculty member since 1989. He has taught numerous graduate and undergraduate courses from the math and computer science curricula. He is currently a professor and a graduate student advisor in the Boston University Metropolitan College.

Yuting Zhang, Ph.D.

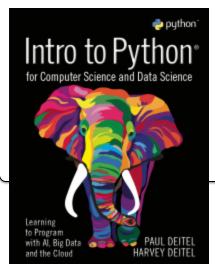


research seminar.

Dr. Zhang's current research mainly focus on mobile security, particularly Android security. Her past research focus was in resource management in soft real-time systems, virtual machine systems, and Internet end-systems, though her interest spreads to all areas of computer systems and networks. Conducted through both theoretic analysis and empirical evaluation, her research has resulted in publication in a number of conference proceedings and journals. Zhang served as an assistant professor at Merrimack College, Wentworth Institute of Technology, Allegheny College, and University of Science and Technology Beijing. She has taught a variety of courses, including information technology, Java/C++/C programming, operating systems, computer networks, analysis of algorithms, software engineering, programming languages, and a

Materials

Required Book



Intro to Python for Computer Science and Data Science

by Paul Deitel and Harvey Deitel

Publisher: Pearson

ISBN-10: 0135404673

This book can be purchased from Barnes and Noble at Boston

<u>University</u>.

MathJax

Variables, formulae, and equations in this course are rendered using MathJax.

ing Fractions

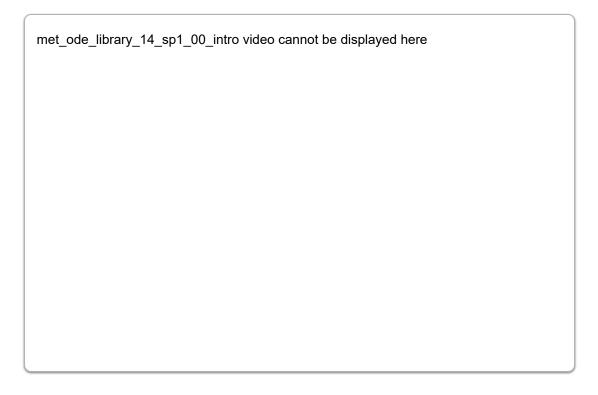
ig fractions: $\frac{a}{b} \pm \frac{c}{d} = \frac{ad \pm cb}{bd}$, often this is asy to remember. a, b, c, d do not have to be following:

To enable its features in your browser, right-click (or ctrl-click on a single-mouse-button Mac) on a variable or equation to see your MathJax settings.

MathJax can be used with the <u>MathPlayer</u> plugin for Internet Explorer, which converts math to speech and highlights the math as it is spoken.

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:



All of the videos in the series are available on the Online Library Resources 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 http://www.bu.edu/library. 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 Collections to access eBooks and eJournals directly.

If you have questions about library resources, go to <u>Ask a Librarian: Help & FAQs</u> to email the library or use the live-chat feature.

To locate course eReserves, go to 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.

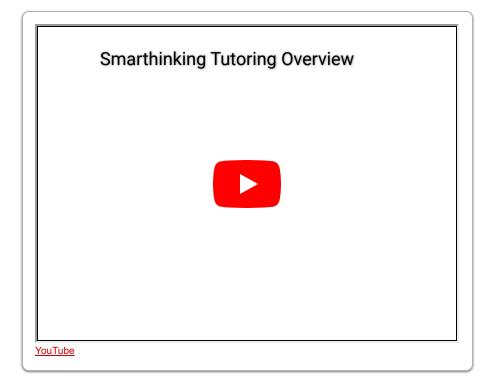
Free Tutoring Service



Free online tutoring with Smarthinking is available to BU online students for the duration of their courses. The tutors do not rewrite assignments, but instead teach students how to improve their skills in the following areas: writing, math, sciences, business, ESL, and

Word/Excel/PowerPoint.

You can log in directly to Smarthinking from Online Campus by using the link in the left-hand navigation menu of your course.



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.

Study Guide

This course starts on a **Tuesday**. The modules in this course run from **Tuesday to Monday**.

Module 1 Study Guide and Deliverables

Readings:

• Module 1 online content

• Deitel: Chapter 2: Section 2.4

Lab: • Programming Lab 1 due Saturday, January 21 at 6:00 AM ET

Assignments: • Programming Assignment 1 due Tuesday, January 24 at 6:00 AM ET

Assessments: • Math Quiz 1 due Tuesday, January 24 at 6:00 AM ET

Live Classrooms: • Wednesday, January 18 from 9:00-10:00 PM ET

• Saturday, January 21 from 9:00-10:00 AM ET

Module 2 Study Guide and Deliverables

Readings: • Module 2 online content

Deitel:

• Chapter 2: all sections except 2.9.

• Chapter 3: Sections 3.5, 3.6

Programming Lab 2 due Saturday, January 28 at 6:00 AM ET

Assignments: • Programming Assignment 2 due **Tuesday**, **January 31 at 6:00 AM ET**

Assessments: • Math Quiz 2 due Tuesday, January 31 at 6:00 AM ET

Live Classrooms: • Wednesday, January 25 from 9:00-10:00 PM ET

• Saturday, January 28 from 9:00-10:00 AM ET

Module 3 Study Guide and Deliverables

Readings: • Module 3 online content

• Deitel: Chapter 3: Sections 3.7, 3.8

Lab: • Programming Lab 3 due Saturday, February 4 at 6:00 AM ET

Assignments: • Programming Assignment 3 due **Tuesday, February 7 at 6:00 AM ET**

Assessments: • Math Quiz 3 due Tuesday, February 7 at 6:00 AM ET

Live Classrooms: • Wednesday, February 1 from 9:00-10:00 PM ET

Saturday, February 4 from 9:00-10:00 AM ET

Module 4 Study Guide and Deliverables

Readings: • Module 4 online content

Deitel: Chapter 4: Sections 4.1, 4.2, 4.3

Lab: • Programming Lab 4 due Saturday, February 11 at 6:00 AM ET

Assignments: • Programming Assignment 4 due Tuesday, February 14 at 6:00 AM ET

• Systems Assignment 1 due Tuesday, February 14 at 6:00 AM ET

Assessments: • Systems Quiz 1 due Tuesday, February 14 at 6:00 AM ET

Live Classrooms: • Wednesday, February 8 from 9:00-10:00 PM ET

• Saturday, February 11 from 9:00-10:00 AM ET

Module 5 Study Guide and Deliverables

Readings: • Module 5 online content

Deitel:

Chapter 9: Sections 9.1, 9.2, 9.3, 9.4

Chapter 4: Section 4.14

Lab: • Programming Lab 5 due Saturday, February 18 at 6:00 AM ET

Assignments: • Programming Assignment 5 due Tuesday, February 21 at 6:00 AM ET

• Systems Assignment 2 due Tuesday, February 21 at 6:00 AM ET

Assessments: • Systems Quiz 2 due Tuesday, February 21 at 6:00 AM ET

Live Classrooms: • Wednesday, February 15 from 9:00-10:00 PM ET

Saturday, February 18 from 9:00-10:00 AM ET

Module 6 Study Guide and Deliverables

Readings: • Module 6 online content

• Deitel:

• Chapter 5: Sections 5.2, 5.3, 5.16.

Chapter 6: Sections 6.2, 6.3.

Chapter 11: Sections 11.1, 11.2, 11.3

Lab: • Programming Lab 6 due Saturday, February 25 at 6:00 AM ET

Assignments: • Programming Assignment 6 due Tuesday, February 28 at 6:00 AM ET

• Systems Assignment 3 due Tuesday, February 28 at 6:00 AM ET

Assessments: • Systems Quiz 3 due Tuesday, February 28 at 6:00 AM ET

Course Evaluation opens on **Tuesday**, **February 21 at 10:00 AM ET** and closes

Evaluation: on **Tuesday, February 28 at 11:59 PM ET**.

Please complete the course evaluation. Your feedback is important to MET, as it helps us make improvements to the program and the course for future students.

Live Classrooms: • Wednesday, February 22 from 9:00-10:00 PM ET

Saturday, February 25 from 9:00-10:00 AM ET

Final Exam Details

The Final Exam is a proctored exam available from **Wednesday, March 1 at 6:00 AM ET to Saturday, March 4 at 11:59 PM ET**. The exam is only accessible during the final exam period. You can access it from the Assessments section of the course.

The Computer Science department requires that all final exams be administered using an online proctoring service called Examity that you will access via your course in Blackboard. Detailed instructions regarding your proctored exam will be forthcoming from the Assessment Administrator. You will be responsible for scheduling your own appointment within the defined exam window.

Final Exam Duration: 3 hours

This is an **open book/open notes exam**. You may bring notes and other materials to the exam.

You can take the exam only once. The exam features essay and multiple choice questions.

Grading Information

Each week will have a Part A--Python--and Part B--Math or Operating Systems. The assignments, quizzes, and labs each week total 12%: 6% for Python programming and 6% Math (for the first three weeks) or Systems (for the second three weeks).

The final is 28% of the total grade. Half of the final will concern Python, a quarter each will concern Math and Systems.

Weekly Python Assignments

The weekly Python assignments count for 95% of the Python programming grade for the week.

Weekly Python Labs

These questions are similar to what you will find on the same week's assignments, and are intended to help you with the associated subject matter so that you can get feedback before your assignment for that week is due. We encourage you to start the lab early each week. You can work on it through the entire week up-until the interim assessment deadline. All labs are weighted equally, and count for 5% of the Python programming grade for the week.

Final Exam

There will be a proctored Final Exam in this course. Detailed instructions regarding your proctored exam will be forthcoming from the Assessment Administrator. You will be responsible for scheduling your own appointment.

Course Grading

Weekly Python Labs:	0.3% x 6
Weekly Python programming assignments:	5.7% x 6
Weekly Math Quiz:	6% x 3
Weekly System Assignment:	4% x 3
Weekly System Quiz:	2% x 3
Python portion of Final Exam:	14%
Math portion of Final Exam:	7%
Systems Portion of Final Exam:	7%

Translation between letter grades and percentages.

A+ (We can't suggest improvements)	97-100
A (Excellent)	93-96.99
A- (Excellent; minor improvement evident)	90-92.99
B+ (Very good)	87-89.99

B (Good)	83–86.99
B- (Good mostly some significant improvements needed)	80-82.99
C+ (Satisfactory; some significant improvements needed)	77-79.99
C (Satisfactory; significant improvements needed)	73–76.99
C- (Satisfactory; significant improvements required)	70-72.99
D Many improvements required	65
Fail	0

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.

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

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 Senior 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, Annie Imperato. Annie administers the academic aspects of the program, including admissions and registration. You can ask her questions about the program, registration, course offerings, graduation, or any other program-related topic. She can be reached at metcsol@bu.edu or (617) 353-2566.

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

Professor Anatoly Temkin, Computer Science Department Chairman. You can reach Professor Temkin at temkin@bu.edu 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 and Access Services

In accordance with University policy, every effort will be made to accommodate students with respect to speech, hearing, vision, or other disabilities. Any student who may need an accommodation for a documented disability should contact Disability and Access Services at 617-353-3658 or at access@bu.edu for review and approval of accommodation requests.

Once a student receives their accommodation letter, they must send it to their instructor and/or facilitator each semester.

They must also send a copy to their Faculty & Student Support Administrator, who may need to update the course settings to ensure accommodations are in place. Accommodations cannot be implemented if the student does not send their letter.

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 an 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 point them out privately and 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.
- Online courses will open to students in Blackboard on the first day of the term.
- Online courses close to students three weeks after the last day of the term. Please plan to download and save any assignments or material you'd like to keep by that date.

Technical Support

Help Desk

Boston University IT Help Desk can be reached via email (ithelp@bu.edu), phone (617-353-4357) or by filling out the support form on their website. For IT Help Desk hours of operation, visit the contact page. If you are contacting IT outside of business hours, you will receive a response the following day. Visit the BU Information Services & Technology (IS&T) news-page for announcements and system-wide alerts.

Technology Requirements and Resources

To successfully view all content in your course, it is important that your computer setup meets the necessary minimum technical requirements. Certain courses with specific functionality or educational tools may require additional technical requirements, these details can be found on the Course Resources or Materials page in the Syllabus.

System Requirements

- Access to reliable, high-speed internet: Check your internet connection speeds
- Learning Management System (Blackboard): System Requirements
- Synchronous live classroom sessions (Zoom): System requirements for Windows, macOS, and Linux
- Courses with proctored exams (Examity): System requirements for Windows, macOS

Downloads

- Recommended web browsers: Mozilla Firefox or Google Chrome
- Synchronous live classroom sessions (Zoom): <u>Zoom download center</u>
- Courses with proctored exams (Examity): Desktop or laptop computer with Google Chrome or Microsoft Edge

Recommended Hardware

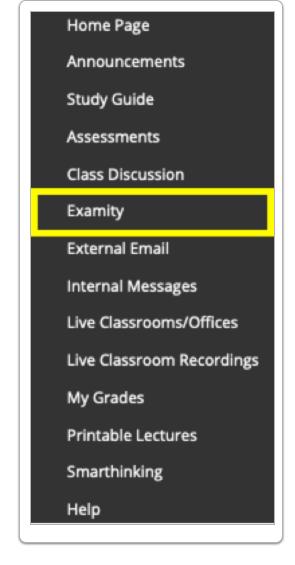
- Desktop or laptop computer recommended for best experience, some course functionality including proctored exams are not compatible with phones or tablets
- · Headset with built-in microphone for high quality audio during live classroom sessions
- Webcam (required for proctored exams)
- Working computer speakers (required for proctored exams)

Clearing Your Browser Cache

It is recommended that users periodically <u>clear their browser cache</u> to ensure they are viewing the most current course content. Completing this step often resolves login issues and problems viewing course materials.

Proctored Exams

Courses with proctored exams will have an Examity link in the left-hand course navigation. This link will not appear until scheduling opens. The ODE Assessment Administrator will notify you when it is time to schedule your exam. Details on Examity's technical requirements and how to schedule your exam are in the Proctored Exam Information module on the course homepage. The Assessment Administrator can be reached at pexams@bu.edu. Examity support is available 24/7 via phone (855-392-6489), email (support@examity.com), or 'live chat' when logged in to the Examity dashboard.



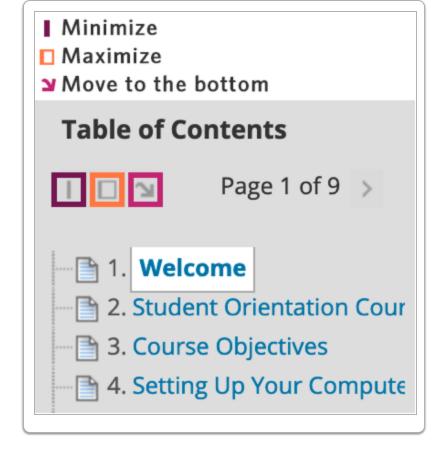
Navigating Courses

While navigating through your courses it's important to note that all hyperlinks will open in a new browser window.

The Blackboard navigation tools—shown in the images below—allow you to show and hide both the Course Menu and the Table of Contents which can free up space when moving through weekly lecture material.

The Table of Contents may contain folders that 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.

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



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

