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.

Course Description

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

MET CS 546

Introduction to Probability and Statistics

The first part of this course lays down the mathematical foundation for the study of probability theory and statistics; it will cover functions, combinatorial mathematics, and differentiation and integration fundamentals. The second part of the course concentrates on the study of discrete and continuous distributions.

Prerequisite: College algebra

Course Overview

The following are some of the topics covered in this course:

- Elements of discrete mathematics (sets, one-to-one and onto functions, graphs of functions)
- Elements of calculus (limits of sequences, continuous functions, derivatives of functions, antiderivatives, and definite integrals)
- Elements of combinatorics (permutations and combinations)
- Elements of the probability theory and statistics (discrete and continuous distributions, binomial, Poisson, geometric, normal distributions, expectations and variances, strong law of large numbers, the central limit theorem)

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.

Course Learning Objectives

Upon successful completion of this course, you will be able to do the following:

- Differentiate functions, take antiderivatives, and find areas under curves.
- Apply combinatorial methods to analyzing problems.
- Apply methods from the probability theory and statistics to analyzing events of a random nature.

Course Outline

- **Calendar Tool** – You can see many due dates in the calendar tool. You may add your own events there, as well. However, please be aware that you may not find all of the important dates for the course listed there. You will stay current by checking announcements, discussions, and emails in the course.
- **Readings** – Each module has online lectures.
- **Discussion** – There are threaded discussions for each module. These discussions are moderated by your facilitator. Postings for each discussion should be completed by the assigned due dates. There are also general discussion boards, which are not graded, for you to use to discuss any issues with your classmates.
- **Practice Problems** – A set of practice problems and additional practice problems are available at the end of each module. They are optional learning activities for you to self-assess what you have learned in the module. After completing the practice problems, you can check the suggested solutions.
- **Quizzes** – There are quizzes due throughout the course. You can access them from the Assessments link.
- **Final Exam** – The final exam can be accessed from the “Assessments” link.

Module 1

- Lecture 1 – Functions, images and preimages, one-to-one functions, limit of a sequence of numbers, continuous functions, derivatives of functions, rules of differentiation, points of local maximum and minimum, and graphs of functions.

Module 2

- Lecture 2 – Horizontal and vertical asymptotes, Inflection points, the antiderivative of a function, the definite integral of

amental theorem of calculus.

Module 3

- Lecture 3 – K-samples, permutations, combinations, sample space, events, and the classical and statistical definitions of probability.

Module 4

- Lecture 4 – Independent events, discrete random variables, binomial distribution, and the approximation of the binomial distribution.

Module 5

- Lecture 5 – Geometric distribution, the mathematical expectation and the variance of a random variable, independent random variables, strong law of large numbers, and the properties of distribution functions.

Module 6

- Lecture 6 – Continuous distribution functions, density functions, the mathematical expectation, and the variance of a continuous random variable, standard deviation, normal distribution, and the central limit theorem.

Module 7 - Prepare for and Take the Final Exam

You will prepare for, and take, the proctored final exam.

The course will remain open for three weeks after the final exam so that you can continue discussions and ask any questions about your grades or the course. This is also a time when we endeavor to learn from you how we can modify the course so that it better meets your needs.

Instructor

Joshua Enxing

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Joshua Enxing has been involved with teaching in the MET CS department since 2012 when he was an undergraduate at the Metropolitan College he teaches CS677 and facilitates CS546 and CS566, while teaching

various math and computer science courses at other Boston-area universities. He has worked in many different positions in the technical field, among them are software developer, data scientist, and statistical programmer. During his time at Tufts University, he served as Vice President and then President of the Tufts Chapter of SIAM (Society of Industrial and Applied Mathematics). In conjunction with colleagues at Tufts University, he was part of NSF-funded research dealing with novel methods for diffuse optical tomography image reconstruction. Current areas of research include nonparametric statistics, machine learning, and data science.

Course Developer: Anatoly Temkin, Ph.D

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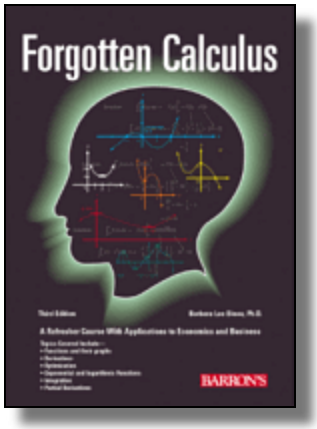
Dr. Anatoly Temkin has been a BU faculty member since 1989. He has taught numerous graduate and undergraduate courses from the math and computer science curricula. He is currently a professor and the Computer Science Department chair in the Boston University Metropolitan College.

Course Materials and Resources

There are no required course textbooks for this class. The lectures will provide you with the necessary information. There will be no reading assignments from the recommended book; however, it is an excellent supplemental text that you may want to review for further elaboration. Although it is not available through the BU bookstore, it can be found online.

Bleau, B. L. (2001). *Forgotten Calculus* (3rd ed.)
Barron's Educational Series.



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Optional Course Software

You can use an equation editor to complete your quizzes in Microsoft Word. Microsoft Equation is a free add-on to Microsoft Word. You can also write out your problems by hand.

Supplemental Materials

Modules 1-6

You will find a number of videos incorporated into the lectures, providing supplemental explanations of the text.

MathJax

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

ing Fractions

ıg 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 t

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 MathPlayer 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

met_ode_library_14_sp1_00_intro video cannot be displayed here

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 Ask a Librarian: Help & FAQs 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.

Quiz Instructions

Please complete the week's quiz fully by the due date and within the allotted time. Each answer must by uploaded as a file. You can make the file using any tool, such as Microsoft Word's Equation Editor or TeX, but it will probably be easiest to print each question as a worksheet, do the problem by hand, and then upload a picture of your completed worksheet.

How to Print a Question on a Worksheet

1. Click the "Make Worksheet" link. The question will open in a new browser window.
2. Print the page. (Use the scale option in the print dialog to make the print larger.)

How to Upload Photos to Quiz with a Phone or Tablet

1. Open the browser on your device and go to onlinecampus.bu.edu
2. Sign in, go to the course, and open the quiz.
3. Click "Browse My Computer", which will prompt you to choose an application or action to upload the file from. Choose

4. Take a photo of your answer and upload the file.

There is a Quiz Practice to practice uploading with unlimited time.

You can access the quizzes-upload page by clicking on the “Assessments” link from the menu to your left.

> If you have any questions, please contact your facilitator or post a question in the corresponding discussion board for this quiz.

Microsoft Equation Editor

Installing Microsoft Equation Editor

If Microsoft Equation Editor is not available, you may need to install it. If you originally installed Microsoft Office from a network file server or a shared folder, you must install Equation Editor from that location. If you installed Office from a CD-ROM, you must install Equation Editor from the disc.

1. Quit all programs.
2. Click **Add or Remove Programs** in Control Panel.
3. In the **Currently installed programs** box, click the listing for Microsoft Office or Microsoft Word, depending on whether you installed Word as part of Office or as an individual program, and then click **Change**.
4. On the **Maintenance Mode Options** screen, click **Add or Remove Features**, and then click **Next**.
5. If a **Custom Setup** screen appears, select the **Choose advanced customization of applications** check box, and then click **Next**.
6. In the list of features to install, click the expand indicator (+) next to **Office Tools**.
7. Click the arrow next to **Equation Editor**, and then click **Run from My Computer**.
8. Click **Update**.
9. Restart Word.

Insert an Equation

1. Click where you want to insert the equation.
2. On the **Insert** menu, click **Object**, and then click the **Create New** tab.
3. In the **Object type** box, click **Microsoft Equation 3.0**.
4. Click **OK**.
5. Build the equation by selecting symbols from the **Equation** toolbar (toolbar: A bar with buttons and options that you use to carry out commands. To display a toolbar, press ALT and then SHIFT+F10.) and by typing variables and numbers. From the top row of the **Equation** toolbar, you can choose from more than 150 mathematical symbols. From the bottom row, you can choose from a variety of templates or frameworks that contain symbols such as summations.

This was extracted from the Microsoft Word help file.

Study Guide

Module 1 Study Guide and Deliverables

Readings:	Module 1 online content
Discussions:	• Please post your introduction as soon as possible • Discussion 1 postings end Wednesday, January 25, at 6:00 AM ET
Assessments:	Quiz 1 due Wednesday, January 25, at 6:00 AM ET
Live Classrooms:	Live class session on Monday, January 23, 7:00 – 8:00 PM ET

Module 2 Study Guide and Deliverables

Readings:	Module 2 online content
Discussions:	Discussion 2 postings end Wednesday, February 1, at 6:00 AM ET
Assessments:	Quiz 2 due Wednesday, February 1, at 6:00 AM ET
Live Classrooms:	Live class session on Monday, January 30, 7:00 – 8:00 PM ET

Module 3 Study Guide and Deliverables

Readings:	Module 3 online content
Discussions:	Discussion 3 postings end Wednesday, February 8, at 6:00 AM ET
Assessments:	Quiz 3 due Wednesday, February 8, at 6:00 AM ET
Live Classrooms:	Live class session on Monday, February 6, 7:00 – 8:00 PM ET

Module 4 Study Guide and Deliverables

Readings:	Module 4 online content

Discussions:	Discussion 4 postings end Wednesday, February 15, at 6:00 AM ET
Assessments:	Quiz 4 due Wednesday, February 15, at 6:00 AM ET
Live Classrooms:	Live class session on Monday, February 13, 7:00 – 8:00 PM ET

Module 5 Study Guide and Deliverables

Readings:	Module 5 online content
Discussions:	Discussion 5 postings end Wednesday, February 22, at 6:00 AM ET
Assessments:	Quiz 5 due Wednesday, February 22, at 6:00 AM ET
Live Classrooms:	Live class session on **Wednesday, February 22,** 7:00 – 8:00 PM ET

Module 6 Study Guide and Deliverables

Readings:	Module 6 online content
Discussions:	Discussion 6 postings end Wednesday, March 1, at 6:00 AM ET
Assessments:	Quiz 6 due Wednesday, March 1, at 6:00 AM ET
Course Evaluation:	• Course Evaluation opens on Tuesday, February 21, at 10:00 AM ET and closes 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:	Live class session on Monday, February 27, 7:00 – 8:00 PM 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 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. In order to take the exam, you are required to have a working webcam and computer that meets Examity's system requirements. A detailed list of those requirements can be found on the How to Schedule page ("Proctored Final Exam

Information" module at the course home page). Additional information regarding your proctored exam is forthcoming from the assessment administrator. You will be responsible for scheduling your own appointment within the defined exam window.

The exam is accessible during the final-exam period. You can access it from the "Assessments" section of the course. Your proctor will enter the password to start the exam.

Final Exam Structure and Expectations

The final exam is cumulative and it covers the material from the six content weeks of the course. It is closed book and timed to 3 hours.

The final exam consists of 15 multiple-choice problems. The problems are similar to the ones on the weekly quizzes. The main difference is that you are not required to upload your solutions given the multiple-choice format of the questions. Scratch paper is allowed. You can use it to work through the solutions to arrive at the answers.

Regarding the use of calculators, you are free to use a calculator of your own choice. You will be allowed to use a traditional handheld calculator without memory functions. Another option is to use the OS calculator embedded into your operating system. Online calculators are not allowed for the final exam.

There will be a formula sheet embedded into some of the problems on the final exam. The formula sheet is not exhaustive as it contains only some of the most important formulas covered throughout the semester to serve as a guidance. You will need to understand the underlying concepts well to be able to distinguish where each formula can be applied. The formula sheet is not distributed ahead of time. It will be available only during the final exam.

While the formulas can be helpful as a general guidance, it is strongly recommended not rely solely on this when preparing for the exam. You should rather make a deeper review of the material to ensure you have a solid grasp of the concepts.

There will be a communication about the final exam by the Boston University Proctored Exams team. You should read it carefully when it is distributed to the class.

Course References

Bbooks used in the preparation of this course follow:

Gmurman, V. E. (1977). *The theory of probability and mathematical statistics* (5th ed.). Vysshaya Shkola.

Grimaldi, R. P. (2003). *Discrete and combinatorial mathematics: An applied Introduction* (5th ed.). Addison Wesley.

Mendenhall, W., Beaver, R. & Beaver, B. (2002). *Introduction to probability and statistics* (11th ed.). Duxbury Press.

Rothenberg, R. J. (1992). *Probability and statistics.* Cengage Learning.

Course Grading Information

Course Grading Structure

For any graded learning activity (quizzes, discussions, etc.), you will be assigned a numeric grade. The conversion to a letter grade is based on the following distribution:

100-93	A
92-90	A-
89-87	B+
86-83	B
82-80	B-
79-77	C+
76-73	C
72-70	C-
69-60	D
Below 60	F

Grading Distribution

Your final grade for this course will be derived from the following:

- Discussions:10%
- Six quizzes @ 10% each: a total of 60%
- Final exam: 30%

Discussions

Graded Discussions – Students will be participating in discussions that will be graded on a 100-point scale: Go to the Discussion Rubric.

Proctored Final Exam

There will be a proctored final exam in this course.

Detailed instructions regarding your proctored exam are forthcoming from the Assessment Administrator. You will be responsible for scheduling your own appointment.

Delays

If, for any reason, you are unable to meet any assignment or assessment deadline, contact your course facilitator. All assignments and assessments must be completed. Extensions may be granted under mitigating circumstances.

Discussion Requirements and Grading Rubric

Graded discussion periods are from the Wednesday of each module until 6:00 AM ET on the Wednesday of the following module. You're certainly welcome to continue a discussion past the grading period, but that additional posted material will not affect your discussion grade.

Discussion Requirements

The goal of the graded discussions in CS546 is to establish a space where you can provide your input on the selected weekly topics and to interact with each other. Such cooperation helps you understand the material and retain the knowledge, and also creates a sense of belonging to our course group.

In this context, we would like to clarify the discussion requirements, which are basically twofold: First, you have to provide an original answer to the topic for the week, and second, you have to post (at least) three feedback comments to the original answers given by your peers—in other words, your answer plus three comments. This means that your comments must be posted in the threads created by other students to ensure that everyone receives feedback. Furthermore, when working on the discussions, make sure to post as early as possible rather than wait until the deadline. This will give your peers enough time to comment on your original post.

To fully understand the expectations, you should familiarize with yourself with the “Discussion Grading Rubric” section of the Syllabus. For your convenience, the four most important criteria are summarized below:

Participation (91 – 100 points)

Continually relevant and consistent participation throughout the discussion period

Community (91 – 100 points)

Continually responds thoughtfully in a way that keeps discussions going and provides help

Content (91 – 100 points)

Exceptionally useful, on-topic, and interesting information, ideas, and analysis

Reflection and synthesis (91 – 100 points)

Leads group's effort to clarify, summarize, or synthesize topics raised in discussions

What does this mean? For example, if you provide a nice answer to the discussion question with solid and useful content, but the other three components of the discussion grading rubric are missing, then you will not receive full credit. Actually, a significant number of points may be deducted because three grading rubric components are missing.

So, even if the content of your post is interesting and useful in itself, this is not the only criterion for evaluating your discussion contributions. According to the grading rubric, there are three other criteria along with content: participation, community, and reflection and synthesis.

When you work on your comments, you may use outside material, provided that you properly cite it. It is extremely important to cite work authored by others; otherwise it will be considered plagiarism. We make regular checks of your comments to ensure that the work you post is your original work. If a case of plagiarism is detected, it will be a violation of the Academic Conduct Code, and the case may be taken to the Dean's Office.

Finally, on the other extreme, note that short comments—such as "nice post," "interesting," and "well done," without any meaningful substance—will not be counted as they do not contribute to the overall discussion topic.

To summarize all of this, make sure to 1) post as early as possible before the deadline and 2) participate actively, with at least a few meaningful comments, along with your original answer to the discussion question.

The rubric below is the guide we use to evaluate your discussion contributions.

Discussion Grading Rubric

Criteria	51–60	61–70	71–80	81–90	91–100

Participation	Very limited participation	Participation generally lacks frequency or relevance	Reasonably useful relevant participation during the discussion period	Frequently relevant and consistent participation throughout the discussion period	Continually relevant and consistent participation throughout the discussion period
Community	Mostly indifferent to discussion	Little effort to keep discussions going or provide help	Reasonable effort to respond thoughtfully, provide help, and/or keep discussions going	Often responds thoughtfully, and frequently in a way that keeps discussions going and provides help	Continually responds thoughtfully and in a way that keeps discussions going and provides help
Content	No useful, on-topic, or interesting information, ideas, or analysis	Hardly any useful, on-topic, or interesting information, ideas, or analysis	Reasonably useful, on-topic, and interesting information, ideas, and/or analysis	Frequently useful, on-topic, and interesting information, ideas, and analysis	Exceptionally useful, on-topic, and interesting information, ideas, and analysis
Reflection and Synthesis	No significant effort to clarify, summarize, or synthesize topics raised in discussions			Contributes to group's effort to clarify, summarize, or synthesize topics raised in discussions	Leads group's effort to clarify, summarize, or synthesize topics raised in discussions

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 ion 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

Microsoft Azure Dev Tools for Teaching

Microsoft Azure Dev Tools for Teaching 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 Microsoft Azure Dev Tools for Teaching (You may have to enter your personal BU login credentials to access this page.)

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 d 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): Zoom download center
- 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 ohones or tablets

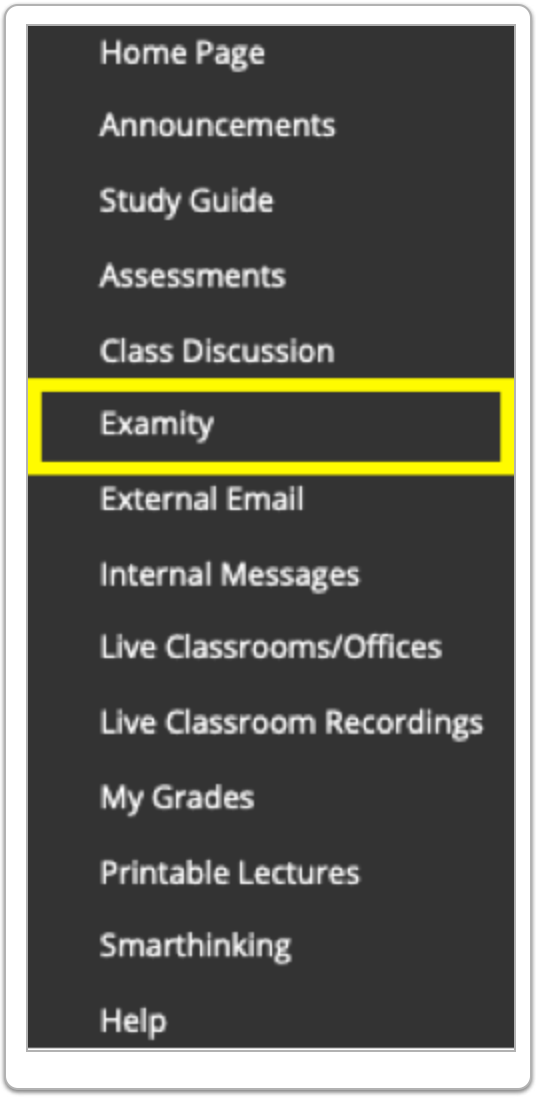
- Headset with built-in microphone for high quality audio during live classroom sessions
- Webcam (required for proctored exams)
- Working computer speakers (required for proctored exams)

Clearing Your Browser Cache

It is recommended that users periodically clear their browser cache 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.



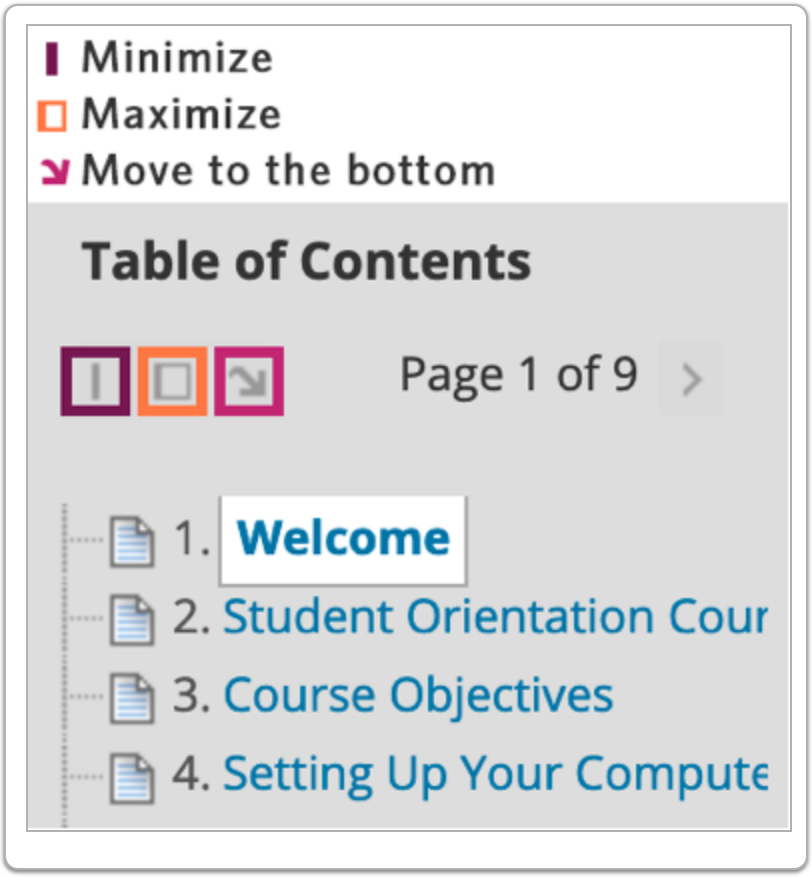
Navigating Courses

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: