## **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 622**

#### **Advanced Programming Techniques**

Polymorphism, libraries, method specifications, code management, exceptions, generics, lambdas, streams, database connectivity, concurrent programming, functional programming, programming tests. Java will be used to illustrate these concepts. Students will implement a project or projects of their own choosing, in Java.

Prerequisites: MET CS 342, MET CS 520, or MET CS 521; or instructor's consent.

#### **Technical Note**

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**

By successfully completing this course, you will be able to do the following:

· Organize function code to promote lasting readability, reliability, and maintainability.

- Use the advanced features of Java for object-oriented programming.
- Design and develop applications using collections, generics, lambdas, streams in Java.
- Design and develop applications using concurrency, database connectivity, and networking in Java.

### Instructor

#### Warren Mansur



Computer Science Department
Metropolitan College
Boston University

Email: mansur@bu.edu

Office Hours and Questions: You will have ample opportunity for questions at our many Live Classrooms. I also welcome your questions via Online Campus and standard email.

Hello,

My name is Warren Mansur, and I am your instructor. I welcome the opportunity to teach and interact with all of you. One of my goals in this course is to show you how exciting database design and implementation is, and how important it is for business today. I am passionate about teaching and course development, and I look forward to interacting with you in the many ways supported by this course.

I received a master's degree in computer science from Boston University, and my master's thesis was in the area of relational database design patterns. Since 2005, I have been heavily involved both with teaching and course development in Boston University's online MSCIS program. I have worked as an enterprise database and software architect and developer for several organizations, including Lockheed Martin, Hewlett Packard, and the New York State Court System.

The best way to reach me outside of our many Live Classroom sessions is to email me at mansur@bu.edu. I normally check BU email many times per day.

## **Initial Course Developer**

### Uday Chakraborty, Ph.D.

Professor of the Practice of Computer Science

Having earned his Ph.D in computer science and engineering from Jadavpur University in 1994, Dr.



Chakraborty went on to gain professional experience working in the software industry on several large-scale commercial projects. His research is focused on machine learning, and other areas of expertise include software engineering, data mining, and advanced data structures and algorithms.

Professor Chakraborty's international professional and academic experience includes work as a software engineer at CMC Limited and research scientist position at the German National Research Center for Information Technology (GMD, now Fraunhofer-Gesellschaft) in Bonn, Germany. He was also a visiting scientist with the computer science department at Carnegie Mellon

University, for which he received a United Nations Industrial Development Organization (UNIDO) Fellowship. Prior to Boston University, Chakraborty was professor of computer science at the University of Missouri at St. Louis.

Chakraborty has authored nearly a hundred publications, including books, journal articles, and refereed papers published in highly selective journals and proceedings. He is editor of the journal *New Mathematics and Natural Computation*, and currently sits on the editorial boards of several other publications. He has been involved in supervision of student research at both master's and doctoral levels. He has also been successful in securing research grants from several national agencies and organizations.

## Significant Contributor to Course Development

#### Eric Braude, Ph.D.

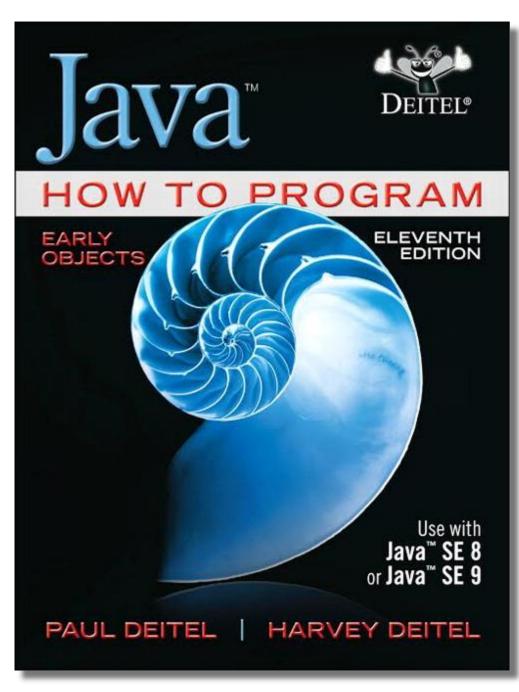


Associate Professor of Computer Science

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."

## **Materials**

## **Optional Book**



Paul J. Deitel and Harvey Deitel (2018) Java How to Program, Early Objects. (11th Edition)

Publisher: Pearson.

ISBN-13: 978-0134743356

ISBN-10: 0134743350

The book is NOT required for the course. It's an optional reference that may be handy for your learning.

This book can be purchased from Barnes and Noble at Boston University.

### **IDE Installation Guide**

You may use either Eclipse or IntelliJ in this course. Install guides for both are below.

Eclipse Install Guide

This installation guide shows you how to download and install Eclipse, create and execute a HelloWorld project, and export a project for submission to Blackboard. Click to download the Eclipse install guide.

IntelliJ Install Guide

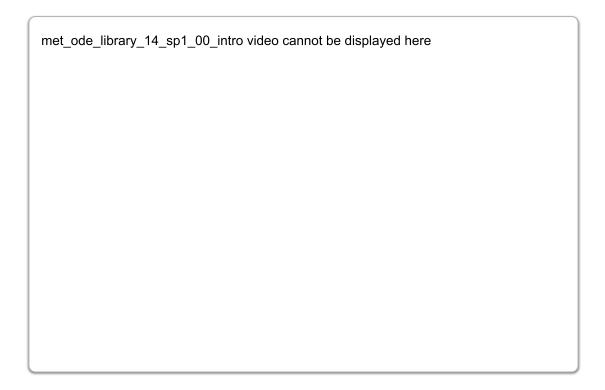
This installation guide shows you how to download and install IntelliJ, create and execute a HelloWorld project, and export a project for submission to Blackboard. Click to download the IntelliJ install guide.

## Installation Guide for SQLLite

We use the SQLite database to illustrate database connectivity in Java in Module 6. Before starting Module 6, please follow the steps in the <u>Getting Started with SQLite</u> tutorial. That tutorial will get you up and running with SQLite and its associated SQL client, DB Browser for SQLite.

## **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 <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

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</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	g from Onlin	e Campus	by using	the link i	n the left	-hand na	vigation r	nenu 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 is organized around seven weeks. The last week is reserved for the final exam so we will have six weeks to cover the material. The material is presented as modules, each module containing a set of related topics.

#### Module 1 Study Guide and Deliverables

Topics: Lecture 1 Object-Oriented Fundamentals

Readings: • Classes and objects review: Deitel & Deitel, Chapters 6 through 8

• Inheritance: Deitel & Deitel, Chapter 9

Polymorphism and interfaces: Deitel & Deitel, Chapter 10

Module 1 online content

Discussions: Please post your introduction as soon as possible.

Assessments: Interim Assessment 1 due Sunday, January 16 at 6:00 AM ET

Assignments: Assignment 1 due Wednesday, January 19 at 6:00 AM ET

• Thursday, January 13, from 9:00 PM to 10:00 PM ET

Friday, January 14, from 9:00 PM to 10:00 PM ET

#### Module 2 Study Guide and Deliverables

Topics: Lecture 2 Handling Text and Exceptions

Readings: • Exception handling: Deitel & Deitel, Chapter 11

Regular expression, StringBuilder: Deitel & Deitel, Chapter 14

Text I/O, Files: Deitel & Deitel, Chapter 15

Module 2 online content

Assessments: Interim Assessment 2 due Sunday, January 23 at 6:00 AM ET

Assignments: Assignment 2 due Wednesday, January 26 at 6:00 AM ET

Live Classrooms: • Wednesday, January 19, from 8:00 PM to 9:00 PM ET

• Thursday, January 20, from 9:00 PM to 10:00 PM ET

#### Module 3 Study Guide and Deliverables

Topics: Lecture 3 Generics

Readings: • Generic collections: Deitel & Deitel, Chapter 16

Generic classes and methods: Deitel & Deitel, Chapter 20

Module 3 online content

Assessments: Interim Assessment 3 due Sunday, January 30 at 6:00 AM ET

Assignments: Assignment 3 due Wednesday, February 2 at 6:00 AM ET

Wednesday, January 26, from 8:00 PM to 9:00 PM ET

Thursday, January 27, from 9:00 PM to 10:00 PM ET

#### Module 4 Study Guide and Deliverables

Topics: Lecture 4 Binary I/O, JavaFX, Lambdas and Streams

Readings: • Binary I/O, object serialization: Deitel & Deitel, Chapter 15

Java SE 8 Lambdas and Streams: Deitel & Deitel, Chapter 17

JavaFX: Deitel & Deitel, Chapter 22

· Module 4 online content

Assessments: Interim Assessment 4 due Sunday, February 6 at 6:00 AM ET

Assignments: Assignment 4 due Wednesday, February 9 at 6:00 AM ET

Wednesday, February 2, from 8:00 PM to 9:00 PM ET

Thursday, February 3, from 9:00 PM to 10:00 PM ET

#### Module 5 Study Guide and Deliverables

Topics: Lecture 5 Concurrency

Readings: • Concurrency: Deitel & Deitel, Chapter 23

Module 5 online content

Assessments: Interim Assessment 5 due Sunday, February 13 at 6:00 AM ET

Assignments: Assignment 5 due Wedneday, February 16 at 6:00 AM ET

• Wednesday, February 9, from 8:00 PM to 9:00 PM ET

Thursday, February 10, from 9:00 PM to 10:00 PM ET

#### Module 6 Study Guide and Deliverables

Topics: • Lecture 6 Java Database Connectivity

Lecture 7 Java Networking Connectivity

Readings: • Deitel & Deitel, Chapter 24

Networking: Deitel & Deitel, Chapter 28 (online; accessible from the

textbook's web site)

Module 6 online content

Assessments: Interim Assessment: none

Assignments: Assignment 6 due Wednesday, February 23 at 6:00 AM ET

Wednesday, February 16, from 8:00 PM to 9:00 PM ET

Classrooms: • Thursday, February 17, from 9:00 PM to 10:00 PM ET

#### Final Exam Details

The Final Exam is a proctored exam available from Friday, February 25 at 6:00 AM ET to Monday, February 28 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. 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 on the course home page). Additional information 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.

The exam will be open book/open notes and is accessible only 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 Duration: 3 hours.

The exam features essay questions. Each question has equal points.

# **Evaluation of Students and Grading**

To attain excellence ("A" work), you will be expected to develop your own analyses and comparisons. More detailed criteria are listed later in this Syllabus section.

### **Basis for Grades**

There are three components to your grades.

#### 1. Module Assignments

- Most of the content of the course will be explored through module assignments that build a term
  project. You are permitted to submit and resubmit your assignment unlimited times to turn in your
  improved work, as long as before the assignment deadline for that module.
- The module assignments in total are worth 60% of the course grade. The teaching team expects
  your understanding to improve throughout the course. Accordingly, the first sets of assignments
  weigh less than the rest, so that you have opportunities to catch up along the way. The weight of
  assignments ramps up as the following:
  - Assignment 1: 7%
  - Assignment 2: 9%
  - Assignment 3: 10%

Assignment 4: 11%

Assignment 5: 11%

Assignment 6: 12%

#### 2. Interim Assessments

These questions are typically part of your module's assignment and are intended to help you with the associated subject matter. You may only submit your interim assessment once, so that you can get feedback before your assignment for that module is due. We encourage you to start the Interim Assessment early each module. You can leave the assessment open and work on it at any time prior to its deadline.

#### 3. Final Exam

There will be a three-hour final exam that is similar in format to the module homework assignments. This mainly provides you the opportunity to show what you have learned by implementing your project. More details will be provided when the final exam is closer.

## **Grade Computations**

The course grade will be computed from the following:

Overall Grading Percentages								
Module Assignments	60							
Interim Assessments	10							
Proctored Final Exam	30							

### Rubric

**The module assignments** are graded according to the evaluation guidelines that will be provided with the assignment. These are averaged using A+=97 A=95, A-=93, B+=87, B=85, B-=83 etc. When a paper is considered outstanding, a score up to 100 can be given.

Grades typically start lower, allowing room for growth as the term progresses.

The interim assessment grades are Acceptably on track (1), Not yet acceptably on track (0). Otherwise:

>=5 " Acceptably...":: A

>=4 " Acceptably...":: B

>=3 " Acceptably...":: C

.=1 " Acceptably...":: D
None "meets ...":: F

**Course grade:** To get an "A" for the course, your course score should be at least 93; A- at least 90; B+ at least 87; B at least 83; B- at least 80; C+ at least 77; C at least 73; C- at least 70 etc.

By the time grades are submitted to the registrar, the class average will be approximately a 87 (B+).

An "A" grade at Boston University is reserved for excellent work. If you are given and A, you are to be especially congratulated. The university officially designates good work as deserving of a "B" and we reward good work with a "B" accordingly. It is our obligation to tell you as far as we can what would improve your work. (That can sometimes be hard if you receive an A, of course.) If you don't see such feedback, please remind your instructor about it. Grades are an excellent motivator but they are only means to an end rather than ends in themselves. The average grade in graduate courses is usually expected to be a B+. If the course average turns out to be less than this at the end of the term, and the class performance is not less than average, I am able to elevate some grades that fall on borderlines.

## **Ungraded Items:**

**Live classroom sessions:** Live classroom sessions will be offered during this course in Modules 1–6. Each week, students have a live classroom session with the instructor and another live classroom (or problem-solving session) with the facilitator. Days/times will be posted in the Study Guide and the "Announcements" area.

- Your participation, while not mandatory, will be valuable to you and the class. To participate in the live classroom discussion, you will need to go to the "Live Classroom/Offices" area.
- Live classroom sessions will be recorded and archived for further viewing. You go to the "Live Classroom Recordings" area to view the recordings.

### **Submission Schedule**

To keep the course running smoothly for everyone, there is a schedule of when assignments and interim assessments should be submitted. If you anticipate being unable to complete an item by its deadline due to circumstances beyond your control, please dialog with your facilitator about this in advance of the deadline (unless it is an emergency which makes this impossible, of course). We may request additional documentation but we will be happy to help. Otherwise, no regular credit is due. Some credit may be given at the end of the semester depending on your overall performance. You also need to request feedback.

# **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

# 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 <u>Microsoft Azure Dev Tools for Teaching</u> (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 Lead Faculty and Student Support Administrator, Jennifer Sullivan. Jen is here to ensure you have a positive online experience. You will receive emails and announcements from Jen throughout the semester. Jen represents Boston University's university services and works for the Office of Distance Education. She prepares students for milestones such as course launch, final exams, and course evaluations. She is a resource to both students and faculty. For example, Jen can direct your university questions and concerns to the appropriate party. She also handles general questions regarding Online Campus functionality for students, faculty, and facilitators, but she does not provide tech support. She is enrolled in all classes and can be contacted within the course through Online Campus email as it is running. You can also contact her by external email at <a href="mailto:jensul@bu.edu">jensul@bu.edu</a> or call (617) 358-1978.

## **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 <a href="metcsol@bu.edu">metcsol@bu.edu</a> 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 <a href="kimrich@bu.edu">kimrich@bu.edu</a> 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 <a href="mailto:asgorlin@bu.edu">asgorlin@bu.edu</a>, or (617)-353-2566.

**Professor Anatoly Temkin, Computer Science Department Chairman.** You can reach Professor Temkin at <a href="mailto:temkin@bu.edu">temkin@bu.edu</a> 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 <u>Disability and Access Services</u> at 617-353-3658 or at <u>access@bu.edu</u> 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 (<a href="ithelp@bu.edu">ithelp@bu.edu</a>), phone (617-353-4357) or by filling out the <a href="support form">support form</a> on their website. For IT Help Desk hours of operation, visit the <a href="contact">contact</a> <a href="page">page</a>. 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) <a href="newspage">newspage</a> 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): <u>System Requirements</u>
- 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: <u>Mozilla Firefox</u> or <u>Google Chrome</u>
- Synchronous live classroom sessions (Zoom): Zoom download center
- Courses with proctored exams (Examity): Desktop or laptop computer with <u>Google Chrome</u> or <u>Microsoft</u>
   <u>Edge</u>

#### Recommended Hardware

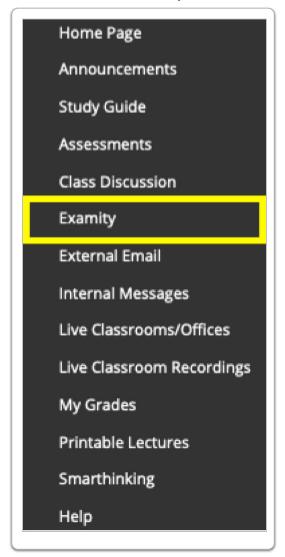
- Desktop or laptop computer recommended for best experience, some course functionality including proctored exams are not compatible with phones or tablets
- Headset with built-in microphone for high quality audio during live classroom sessions
- · Webcam (required for proctored exams)
- Working computer 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 <a href="mailto:pexams@bu.edu">pexams@bu.edu</a>. Examity support is available 24/7 via phone (855-392-6489), email (<a href="mailto:support@examity.com">support@examity.com</a>), or 'live chat' when logged in to the Examity dashboard.



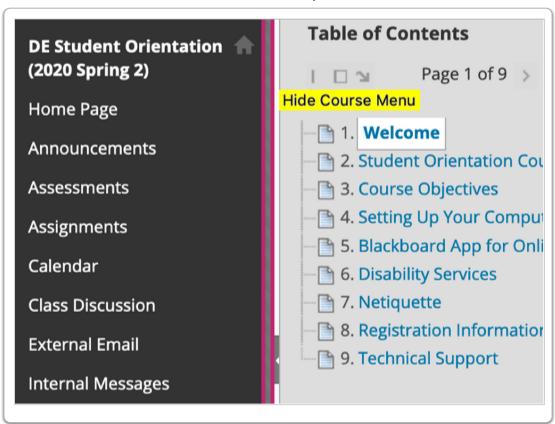
## **Navigating Courses**

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

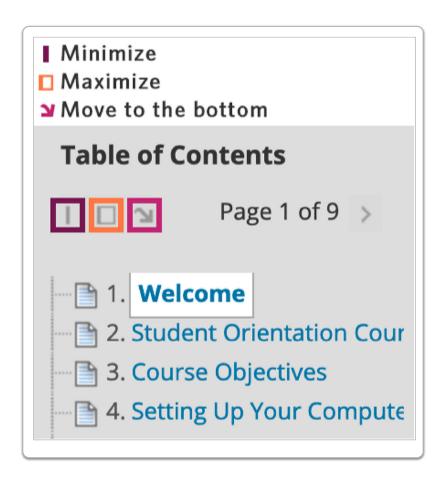
The Blackboard navigation tools, as shown in the images below; allow you to show and hide both the Course Menu and the Table of Contents which can free up space when moving through weekly lecture material.

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:



Boston University Metropolitan College