Course Description

MET CS200
Fundamentals of Information Technology

This course introduces information technology concepts and terminology and foundational mathematics. It also develops analytic and logical thinking and prepares students to take graduate-level courses in information technology and computer information systems. The course starts with the fundamentals of computing systems, including hardware and software, and then addresses the processes for designing and building computing systems, including systems analysis and project management. Relational database technology is introduced including SQL and database design concepts. Computer networks, including their components, types, design and management are explained. And lastly, students are introduced to software development and receive a thorough introduction to the Java programming language. The course reviews the mathematics upon which computing systems are founded including number systems, set theory, algebra, and functions.

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.

Learning Objectives

The course is designed to prepare students without a technical background in information technology to succeed in graduate courses in the Master of Science in Computer Information Systems (MSCIS) and Master of Science in Telecommunications (MSTC) programs. 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 200 to better prepare for graduate study in information technology before making a final matriculation decision. For students who complete CS 200 the Committee also considers each student’s performance in each of the areas of CS 200, such as computer systems, systems analysis, mathematics, databases, computer networks, 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 200, then the Admissions Committee will matriculate them into the MSCIS program. Simply passing CS 200 does not assure matriculation, though excellent performance in all areas of CS 200 will earn an applicant matriculation into the program.”

For students coming from other programs, this course is a technically-oriented introductory survey of Information Technology.

Course Objectives

This course will enable you to:

- Understand the major hardware components of a modern computing system and their functions and interactions
- Understand how programs are executed, including the instruction execution cycle and the role of interrupts
- Understand the role of systems and applications software
- Understand the systems analysis and design process
- Understand the basic concepts of databases and database management systems, including the relational model and the basics of SQL
• Understand network architecture, both hardware and software, and be familiar with the basics of network security and management
• Understand how algorithms are developed and implemented in higher level languages
• Be able to design, write, and debug Java programs that use sequence, selection and repetition statements, methods, primitive data types, arrays, and that do I/O
• Understand object oriented concepts including classes, objects and inheritance
• Be able to solve mathematical problems that involve factoring algebraic expressions, operations with algebraic fractions and radicals, operations on sets, linear and quadratic functions

Course Organization

This course is 15 weeks long: 14 weeks of content and 1 week for the final exam. The 14 weeks of content is divided into 7 modules, each two weeks long. Each module includes one major information technology topic and two math topics. Each module consists of:

• reading assignments
• online content
• review questions
• two graded information technology assignments
• two ungraded math assignments
• one graded information technology quiz
• one extra credit information technology related discussion question
• two graded math quizzes.

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.

Course Outline

Module 1 – Fundamentals of Computer Systems

• Computer Systems
  • Hardware Systems
  • Processing Unit
  • Flow of Control
  • Memory
  • Input/Output
  • Software Systems
  • Operating Systems
  • Systems Analysis and Design
• Math
  • Properties of Numbers
  • Operations on Numbers
  • Algebraic Expressions

Module 2 – Databases

• Databases
  • Relational Database Management Systems
  • Introduction to Structured Query Language (SQL)
  • Programming for Databases
  • The Database Life Cycle
  • Jobs in the Database Field
• Math
  • Even and Odd Numbers
Module 3 — Data Communications and Networks

- Data Communications
  - Components of a network
  - Network standards
  - Network layers
  - Types of networks
  - Network security and management
- Math
  - Operations on Algebraic Fractions
  - Inverses
  - Roots
  - Radicals

Module 4 — Basics of Software Development using Java

- Basics of Software Development
  - Overview of Programming Language Systems
  - Installing the Java platform, Standard Edition (Java SE)
  - Installing an Integrated Development Environment (Eclipse)
  - Creating Java Projects
  - Executing Java Programs
  - Debugging Java Programs
  - Variables and Data Types
- Math
  - Arithmetic Expressions
  - Sets

Module 5 — Basics of Java

- Java
  - Promotions and Casting
  - Input/output
  - Conditional statement
  - Repetition Structures
- Math
  - Graphing a Function
  - Deriving the Equation of a Line
  - Intersection of Line with the Axis

Module 6 — Programming in Java

- Java
  - Methods
  - Scope of Variables
  - Recursion
  - Arrays
  - Strings
- Math
  - Quadratic Equations
  - Inequalities Methods

Module 7 — Introduction to Object Oriented Programming

- Classes versus Objects
Module 8 - Final Exam

The final exam is a three-hour, closed-book (no access to any information online or otherwise), no calculator allowed exam consisting of a combination of multiple and multiple choice (choose one) questions. The exam is only accessible during the final exam period. You will access it from either the Assessments section of the course or from the Final Exam module on the home page. Your proctor will enter the password to start the exam.

Instructor

Bruce P. Tis, Ph.D.
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Dr. Bruce Tis is a tenured, full-time faculty member at Simmons College in Boston with appointments in the College of Arts and Sciences and the Graduate School of Library and Information Science. He is an Associate Professor of Computer Science and chaired the Computer Science department at Simmons for 10 years. He received his Ph.D. in Computer Engineering from Boston University, where he has been teaching part time for 28 years in the areas of computer networks, operating systems, security, and Java programming. He has done research in the area of distributed operating systems. Dr. Tis is also interested in computer science education and has published papers on curriculum design and pedagogy, and has conducted workshops on computer security.

Additional Course Developer

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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 a graduate student advisor in the Boston University Metropolitan College.

Study Guide

Module 1 Study Guide and Deliverables

Readings:
- Online - Fundamentals of Computer Systems
- Online - Math 1 & Math 2
- Schaum’s outline of college algebra chapters 1 & 2

Discussions:
Discussion 1 postings end May 27 at 6:00 AM ET
### Assignments
- Assignment 1 due May 20 at 6:00 AM ET
- Assignment 2 due May 27 at 6:00 AM ET

### Assessments
- Math Quiz 1 due May 20 at 6:00 AM ET
- Math Quiz 2 due May 27 at 6:00 AM ET
- Module 1 Quiz due May 27 at 6:00 AM ET

### Module 2 Study Guide and Deliverables

### Readings:
- Online - Data and Databases
- Online - Math 3 & Math 4
- *Schaum's outline of college algebra* chapters 3 & 5

### Discussions:
- Discussion 2 postings end June 10 at 6:00 AM ET

### Assignments:
- Assignment 3 due June 3 at 6:00 AM ET
- Assignment 4 due June 10 at 6:00 AM ET

### Assessments:
- Math Quiz 3 due June 3 at 6:00 AM ET
- Math Quiz 4 due June 10 at 6:00 AM ET
- Module 2 Quiz due June 10 at 6:00 AM ET

### Module 3 Study Guide and Deliverables

### Readings:
- Online - Data Communications and Networks
- Online - Math 5 & Math 6
- *Schaum's outline of college algebra* chapters 6–8

### Discussions:
- Discussion 3 postings end June 24 at 6:00 AM ET

### Assignments:
- Assignment 5 due June 17 at 6:00 AM ET
- Assignment 6 due June 24 at 6:00 AM ET

### Assessments:
- Math Quiz 5 due June 17 at 6:00 AM ET
- Math Quiz 6 due June 24 at 6:00 AM ET
- Module 3 Quiz due June 24 at 6:00 AM ET

### Module 4 Study Guide and Deliverables

### Readings:
- Online - Basics of Software Development using Java
- Online - Math 7 & Math 8
- *Schaum's outline of college algebra* chapters 12 & 13
- *Introduction to Programming in Java* chapter 1

### Discussions:
- Discussion 4 postings end July 8 at 6:00 AM ET

### Assignments:
- Assignment 7 due July 1 at 6:00 AM ET
- Assignment 8 due July 8 at 6:00 AM ET

### Assessments:
- Math Quiz 7 due July 1 at 6:00 AM ET
- Math Quiz 8 due July 8 at 6:00 AM ET
- Module 4 Quiz due July 8 at 6:00 AM ET

### Module 5 Study Guide and Deliverables

### Readings:
- Online - Basics of Java
- Online - Math 9 & Math 10
- *Schaum's outline of college algebra* chapter 14
- *Introduction to Programming in Java* chapters 2–4, 6, 8, 9

### Discussions:
- Discussion 5 postings end July 22 at 6:00 AM ET

### Assignments:
- Assignment 9 due July 15 at 6:00 AM ET
- Assignment 10 due July 22 at 6:00 AM ET

### Assessments:
- Math Quiz 9 due July 15 at 6:00 AM ET
- Math Quiz 10 due July 22 at 6:00 AM ET
- Module 5 Quiz due July 22 at 6:00 AM ET

### Module 6 Study Guide and Deliverables

### Readings:
- Online - Programming in Java
- Online - Math 11 & Math 12
Schaum’s outline of college algebra chapters 16 & 19

Discussions: Discussion 6 postings end August 5 at 6:00 AM ET
Assignments: Assignment 11 due July 29 at 6:00 AM ET
             Assignment 12 due August 5 at 6:00 AM ET
Assessments: Math Quiz 11 due July 29 at 6:00 AM ET
             Math Quiz 12 due August 5 at 6:00 AM ET
             Module 6 Quiz due August 5 at 6:00 AM ET

Module 7 Study Guide and Deliverables
Readings: Online - Introduction to Object Oriented Programming
          Maslanka, J. (2010) Introduction to Programming in Java chapters 5 and 14
Assignments: Assignment 13 due August 12 at 6:00 AM ET
             Assignment 14 due August 19 at 6:00 AM ET
Assessments: Module 7 Quiz due August 19 at 6:00 AM ET

Final Exam Details
The Final Exam is a proctored exam available from August 20 at 8:00 AM ET to August 23 at 11:59 PM ET. The Computer Science department requires that all final exams be proctored.

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

Access to the online discussions and chat feature (but not the module contents), ends on August 20 at 8:00 AM ET and will be unavailable until August 24. Please plan accordingly.

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

Resources

Required Textbooks

A list of errata for this book can be downloaded here.

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


Download the text and Appendix D (illustrations). (Only accessible via link when logged into Boston University Online Campus)

Required Software
You will be implementing a relational database using the MySQL relational database management system. You will use a distribution of
MySQL called XAMPP which includes an apache web server, php, phpMyAdmin, and MySQL. The software runs on either a Mac or Windows machine and is freely available at [www.apachefriends.org](http://www.apachefriends.org).

You will be writing Java programs in this course and using the Oracle (Sun) Java Platform Standard Edition JDK (current or recent version). Instructions for downloading and installing this software can be found in module 4.

To facilitate the program development process, we will be using the Eclipse integrated development environment (IDE). This is an industrial-strength IDE used to develop large systems based on Java. Eclipse is also used in MET CS520.

Both products have versions that run under Windows, OS X, and Linux.

### General Software

We prefer if you submit all assignments in Word format. The facilitators will make comments directly into your files and return them to you.

You might also find a drawing program, such as Visio, useful in drawing diagrams required in some assignments but hand drawn diagrams are acceptable. Visio is available free to you from the MSDNAA program discussed in a later section of this syllabus.

### Live Classroom

In this class we will use the Adobe Connect Live Classroom which is accessible through your browser. You will need headphones to hear audio, and if you want to talk directly to me you will need a microphone as well. However most students use the chat feature and interact with me via their keyboard.

There will be a Live Classroom session every week. These sessions will be recorded and archived to allow you to access them whenever convenient for you. Live Classroom sessions provide you with an opportunity to talk with me and ask questions. I will also review the more challenging parts of the material, and provide additional background material you might find helpful. Since attendance at live classroom sessions is optional, no new course content will be covered. The material will be presented using slides, the electronic whiteboard and shared desktop. I will also use the Live Classrooms to demonstrate program design, implementation and debugging. The Live Classroom supports chat, voice conferencing over telephone or internet, and a variety of visual interaction facilities, including PowerPoint slides and even video if we choose to use it.

I look forward to talking with you, discussing the material, and answering your questions.

In order to participate in these discussions or to access the archived sessions, you need to go to the Live Classroom link on your homepage (located in the left-hand navigation panel) and complete the Setup Wizard. It is recommended you finish all of the login steps at least five minutes prior to the start of the synchronous discussion, so that you are fully prepared to access your live class session.

### Live Classrooms Instructions and Procedures

Complete instructions and procedures, as well as description of features and tools, for Live Classroom are available in the Help section of the left-hand navigation panel.

### Live Offices

This course includes a “Live Office” for each facilitator, one for the professor, and one for student use. Live Offices are similar to Live Classroom, except for a few minor configuration differences. Live Offices are a good way for facilitators and students to go over their assignments or other course material, because it supports convenient document or web sharing and voice. If you plan to take advantage of Live Office sessions, I recommend that you purchase a headset designed to plug into the audio jacks or USB port on your computer. This will give you the ability to talk directly with your facilitator. These headsets are available from many vendors. The price ranges from $10 for a basic but serviceable model up to $50 for a professional model. You may alternatively telephone into the Live Classroom as you would to a conference call.

### Boston University Library Link

As Boston University students you have full access to the BU Library—even if you do not live in Boston. 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](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 include:

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

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

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

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

## Course Grading Information

The course is organized into seven learning modules, each two weeks long. All seven modules consist of one or two major information technology related topics and the first six modules also contain a mathematics component. Each module generally includes:

- two sets of review questions (one set IT related, the other math related)
- two graded math quizzes (only the first 6 modules)
- one graded IT quiz
- two graded IT assignments
- an optional math assignment which is not graded, however solutions are available online (only the first 6 modules)
- an optional extra credit discussion question in each module.

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<thead>
<tr>
<th>Grading Percentages</th>
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<tbody>
<tr>
<td>Quizzes 40</td>
</tr>
<tr>
<td>Assignments 30</td>
</tr>
<tr>
<td>Final exam 30</td>
</tr>
</tbody>
</table>

There is an optional extra credit discussion question in each module. Participation in all discussions is worth a maximum of 3% towards your final grade.

Letter grades will be assigned based on numeric average ranges according to the following:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Approximate Numeric Grade Range</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>95–100</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>91–94</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>87–90</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>83–86</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>80–83</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>76–79</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>72–75</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>68–71</td>
<td>1.7</td>
</tr>
<tr>
<td>D</td>
<td>60–67</td>
<td>1.0</td>
</tr>
<tr>
<td>Fail</td>
<td>&lt;60</td>
<td>0</td>
</tr>
</tbody>
</table>

## Late Policy
While this course is online, it is not self-paced. In most cases the material presented each week prepares you for the material presented in the following week. It has also been our experience that if a student gets behind in completing the material he/she will have great difficulty catching up, and sometimes never does. For these reasons, it is important that you complete the assignments and assessments on time each week. Solutions to the assignments and answers to the assessment questions will be provided each week approximately 48 hours after these materials are due from you. To encourage timely submissions, as well as to be fair to everyone there is a 10 point deduction for assignments submitted up to 24 hours late, and a 20 point deduction for assignments submitted 24-48 hours late. No assignments will be accepted 48 hours after the deadline. Weekly assessments will close and will no longer be available after their due date/time. If you have an extenuating circumstance such as a death in the family, please contact your facilitator and they will work with the instructor to consider granting an exception to this policy.

**Quiz Instructions**

**Accessing the Quiz**

You will have access to the quiz at the beginning of the module. However you should not access the quiz until you have completed all learning activities for the module and are prepared to meet the objectives for that module.

**Review Questions**

- The review questions are for practice.
- The review questions are similar to the ones which will appear in quizzes.
- Your results on the review questions will not affect your grade.
- Unlike the quizzes, you may try the review questions as often as you would like.
- You are not required to take the review questions, although we strongly encourage you to do so.

**Quiz Details**

- You can access the quiz details from the assessments menu.
- The questions are either choose multiple or multiple choice (choose one).
- All questions are randomized including the order in which they appear as well as the order of the choices in multiple choice questions.
- The points for each question are shown.
- The quiz questions will display one at a time on your screen.
- You may skip over questions and revisit them in any order.
- You will have 30 or 60 minutes to complete the quiz. You should have enough time so that you aren't rushed.
- You can take each graded quiz only once.
- You may not pause the quiz and return to it later.
- You will be able to continue to save answers to questions after the time has expired, but any late answers will be time stamped and marked as late. This will allow us to grade your quiz fairly in the event that technical difficulties occur while you take your quiz.

**Saving Answers**

- To answer a multiple choice question, select the appropriate choice from the list below the question.
- When you have completed your response, click "Save Answer" at the top of the question.
- As you proceed through the exam, you can go back and edit previous responses that you saved.
- A timer is displayed above the questions tracking the remaining time available.
- You will see question number buttons above questions. You will need to click on "Question Completion Status" to see the question numbers. You can use these buttons to navigate from question to question at any time.
- When you have completed all answers, go to the last question of the exam and click the "Save and Submit" button.

If a technical issue of any kind arises during the quiz requiring you to go beyond the time limit, complete the quiz answering the remaining questions and then contact your facilitator or instructor immediately.

**Other Questions**

https://onlinecampus.bu.edu/bbcswebdav/pid-2305624-dt-content-rid-7634998_1/courses/14sum1metcs200sol/syllabus/allpages.htm
If you have any questions about the quiz please feel free to contact your facilitator.

If a technical issue of any kind arises during the exam, complete the exam, answering the remaining questions, and then contact your facilitator or instructor immediately.

Technical Support

Assistance with course-related technical problems is provided by the IS&T Help Center. To ensure the fastest possible response, please fill out the online form using the link below.

<table>
<thead>
<tr>
<th>IT Help Center Support</th>
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<tbody>
<tr>
<td><strong>Email</strong></td>
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<tr>
<td><strong>Web</strong></td>
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<tr>
<td><strong>Phone</strong></td>
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</tbody>
</table>

Final Exam Overview

This is a comprehensive exam. There will be questions from each week's subject matter.

How do I access the exam?

You will not have access to the exam until you are in a proctored setting. The Final Exam is password protected and will appear in a separate section on your home page.

Note
A page instructing how to schedule your proctored final exam will be visible by the sixth week of this course.

How much time will I have?

You will have three hours to complete the exam. Also note:

- You can take this exam only once.
- You may not pause the exam and return to it later.
- When the allotted time ends, any questions saved after that time will be marked late, but you will be allowed to continue, just as in the quizzes. Let your proctor and facilitator know if you need to use this overtime feature because of technical difficulties.

What should I bring? What may I refer to during the exam?

- Do not bring any course materials. It is a closed-book exam. Personal electronic devices may not be used.
- You may not access any information online during the exam.
- No calculators will be allowed.
- You will not have access to the course (online lecture notes) during the exam.

What is the format of the exam?

- The final exam contains multiple choice questions.
• All questions are randomized.
• The exam questions will display one at a time on your screen.
• You may skip over questions and revisit them in any order.

**What is the procedure for answering exam questions?**

The final exam procedure is the same as the weekly quizzes:

• To answer a multiple choice question, select the appropriate choice from the list below the question.
• When you have completed your response, click "Save Answer" at the top of the question.
• As you proceed through the exam, you can go back and edit previous responses that you saved.
• A timer is displayed above the questions tracking the remaining time available.
• You will see question number buttons above questions. You will need to click on "Question Completion Status" to see the question numbers. You can use these buttons to navigate from question to question at any time.
• When you have completed all answers, go to the last question of the exam and click the "Save and Submit" button.

**What if I have a comment to make about a particular quiz item?**

There is a short answer area at the end of the exam; it appears as an exam question, but there are no points for this item. Use this as a place to provide feedback about the exam as a whole or to comment upon a particular question. Be sure to include the question title so that the facilitator will know the exact item you are referring to.

Your facilitator will examine your comments, in order to decide whether a grade adjustment or other action should be taken.

**Questions**

If you have any questions about the exam please feel free to contact your facilitator or Instructor in advance. During the exam, report any concerns or questions to your proctor first.

If you encounter technical difficulties that interfere with your ability to complete the exam on time, be sure to tell your proctor and your facilitator promptly.

**Good Luck!**

**Academic Conduct Policy**

For the full text of the academic conduct code, please go to [http://www.bu.edu/met/for-students/met-policies-procedures-resources/academic-conduct-code/](http://www.bu.edu/met/for-students/met-policies-procedures-resources/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.”


## 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.**

  1. **I. Submitting the same work in more than one course** without the consent of instructors.

  2. **J. Altering or destroying another student’s work or records,** altering records of any kind, removing materials from libraries or offices without consent, or in any way interfering with the work of others so as to impede their academic performance.

- **K. Violation of the rules governing teamwork.** Unless the instructor of a course otherwise specifically provides instructions to the contrary, the following rules apply to teamwork: 1. No team member shall intentionally restrict or inhibit another team member’s access to team meetings, team work-in-progress, or other team activities without the express authorization of the instructor. 2. All team members shall be held responsible for the content of all teamwork submitted for evaluation as if each team member had individually submitted the entire work product of their team as their own work.

- **L. Failure to sit in a specifically assigned seat during examinations.**

- **M. Conduct in a professional field assignment that violates the policies and regulations of the host school or agency.**

- **N. Conduct in violation of public law occurring outside the University that directly affects the academic and professional status of the student, after civil authorities have imposed sanctions.**

- **O. Attempting improperly to influence the award of any credit, grade, or honor.**

- **P. Intentionally making false statements to the Academic Conduct Committee or intentionally presenting false information to the Committee.**

- **Q. Failure to comply with the sanctions imposed under the authority of this code.**
Important Message on Final Exams

Dear Boston University Computer Science Online Student,

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

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

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

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

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

Who’s Who: Roles and Responsibilities

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

People in your Online Course in Addition to your Fellow Students

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

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

Your Student Services Coordinator, Andrew Hinkell. Andrew is here to ensure you have a positive online experience. You will receive emails and announcements from him throughout the semester. Andrew 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 ahinkell@bu.edu or call (617) 358-4569 or (855) 261-5255.

People not in your Online Course

https://onlinecampus.bu.edu/bbcswebdav/pid-2305624-dt-content-rid-7634998_1/courses/14sum1/metcs200sol/syllabus/allpages.htm
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, Alexa Muhs.** Alexa administers the academic aspects of the program, including admissions and registration. You can ask Alexa questions about the program, registration, course offerings, graduation, or any other program-related topic. Alexa can be reached at amuhs@bu.edu or (617) 353-2565.

**Your Computer Science Department Program Administrator, Camille Kardoose.** Camille is responsible for administering most aspects of the Computer Science Department, and she can help you with most matters. You can reach Camille at cgkardo@bu.edu or (617) 353-2566.

**Professor Jae Young Lee, Program Advisor.** Dr. Lee reviews requests for transfer credits and waivers and advises students on which courses to take to meet their career goals. Dr. Lee can be reached at jaylee@bu.edu or (617) 358-5165.

**Professor Robert Schudy, Director of the MSCIS Online Program.** Dr. Schudy is responsible for the MSCIS online program. Feel free to contact Dr. Schudy at rschudy@bu.edu or (617) 358-0009.

**Professor Anatoly Temkin, Computer Science Department Chairman.** Dr. Temkin makes final decisions on petitions for transfer credits for courses taken at other institutions. You can reach Professor Temkin at temkin@bu.edu or at (617) 358-2566.

**Professor Lou T. Chitkushev, Associate Dean for Academic Affairs, Metropolitan College.** Dr. Chitkushev is responsible for 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 Schudy, then Professor Temkin, and then Professor Chitkushev.

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

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### Disability Services

Boston University makes every effort to accommodate the unique needs of its students. In keeping with university policy, students are expected to contact the Office of Disability Services (ODS) (www.bu.edu/disability/) each time they register for a course to request accommodations for that course. ODS then provides a letter to the Office of Distance Education which is in turn shared with the respective instructor and facilitator for the upcoming class.

Any student who feels he or she may need an accommodation for a documented disability should contact the Office for Disability Services at (617) 353-3658 or at access@bu.edu for review and approval of accommodation requests.

### Netiquette

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

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

Before WRITING or READING a post, 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?

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.

When you are READING your peers' communication, consider:

- **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 others' mistakes or privately point them out politely.
- **If a comment upsets or offends you, re-read it and/or take some time before responding.**

**Important Note:** Don't hesitate to let your instructor or student services coordinator 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

Go to [http://www.bu.edu/online/online_course_schedule/important_dates/] to view the drop dates for your course.

Go to [http://www.bu.edu/studentlink] to withdraw or drop your course.

- If you are dropping down to zero credits for a semester please contact your college or academic department.
- **Non-participation in your online course does not constitute a withdrawal from the class.**

*The Registration Fee is non-refundable*

## Technical Support

Assistance with Online Campus-related technical problems is provided by the IT Help Center. To ensure the fastest possible response, please fill out the online form using the link below.

### IT Help Center Support

<table>
<thead>
<tr>
<th>Web</th>
<th><a href="http://www.bu.edu/help/tech/learn">http://www.bu.edu/help/tech/learn</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>888-243-4596 or local 617-353-4357</td>
</tr>
</tbody>
</table>

## Important Information

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

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

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

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

[![Table of Contents](image)]

Clicking on the space between the Course Menu and the Table of Contents
Boston University technical support via email (ithelp@bu.edu), the support form (http://www.bu.edu/help/tech/learn), and phone (888-243-4596) is available from 8 AM to Midnight Eastern Time. For other times, you may still submit a support request via email, phone or the support form, but your question won't receive a response until the following day. If you aren't calling, it is highly recommended that you submit your support request via the technical support form at http://www.bu.edu/help/tech/learn as this provides the IS&T Help Center with the best information in order to resolve your issue as quickly as possible.

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

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

### Web Resources/Browser Plug-Ins

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

- Check your computer's compatibility by reviewing Blackboard's System Requirements
- Check your browser settings with Blackboard's Connection Test
- Download Most Recent Version of Adobe Flash Player
- Download Most Recent Version of Adobe Acrobat Reader

### How to Clear your Browser Cache

The IT Help Center recommends that you periodically clear your browser cache to ensure that you are viewing the most current content, particularly after course or system updates. This page will guide you through clearing your cache, with instructions tailored to specific operating systems and browsers: http://www.bu.edu/tech/web/course-sites/blackboard-learn/how-to/clear-your-browser-cache/.

This page is also found within the "How To..." section of the online documentation, which contains a list of some of the most common tasks in Blackboard Learn: http://www.bu.edu/tech/web/course-sites/blackboard-learn/how-to/.