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 (allpages.htm) is also available as a concatenated page, suitable for printing or saving as a PDF for offline viewing.

MET CS682
Information Systems Analysis and Design

This met_cs682_10_fa2_ebraude_w00 is displayed here

Download (http://www.bu.edu/av/disted/met/cis/cs682/downloadable/met_cs682_10_fa2_ebraude_w00.mp4)

course describes modern methods of information system analysis and design for organizations with IT resources. It introduces the discovery process for system feasibility, describes stakeholder analysis, and covers requirements analysis. The course explains use cases and their application to requirements analysis. It covers the management of system analysis projects and risks. “Build vs. buy” trade-offs are discussed. The Unified Modeling Language for specifying object-oriented system designs is discussed. Data flow diagrams and activity models are integrated with the analysis and design coverage. The course covers most of the fundamental system architectures, as well as approaches to detailed design.

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.

Course Objectives and Learning Goals
This course is designed to enable you to do the following

- Discriminate among types of business systems
- Explain and summarize a proposed systems analysis project
- Assess and critique the issues of working in a team
- Distinguish between system-level and low-level requirements
- Distinguish between architectural and detailed designs
- Rank the goals of good system design
- Understand UML models

By reading the lectures and completing the assignments in this course, you will be able to:

- Better predict and deal with risks
- Plan and design a project schedule
- Develop written functional and non-functional requirements
- Create written use cases and scenarios
- Integrate the use of classes in Object-Orientation
- Relate one class to another through inheritance, aggregation and association
- Create sequence diagrams and other UML diagrams
- Construct system architectures and detailed designs

**Week-by-week Topics**

**Weekly Activities**

Each week you will need to:

- Read the online lectures
- Read recommended pages in the textbook (listed below)
- Complete the quiz for interim feedback
- Complete the homework assignment(s)

**Week-by-week Topics**

Week 1 — Introduction and Process

- Types of business systems
- Participants in systems analysis
- A systems analysis example
- Introduction to system process
- Development process alternatives
- Requirements, design and quality assurance
- Configuration management
Week 2 — System Development Processes, Risk and System Design Trade-offs

- System development project management
- Formal and agile processes, their advantages and disadvantages
- Team inter-personnel issues
- Risk management
- Project scheduling
- Organizational structures
- Legacy applications
- Agile approaches
- Team Software Process

Week 3 — System and Requirements Analysis

- The meaning of “requirements”
- System-level requirements
- Detailed requirements
- Functional requirements
- Non-functional requirements
- Techniques for interviewing and documenting requirements
- Introduction to design of user interfaces
- Introduction to use cases, data flow diagrams, state transition diagrams

Week 4 — Modeling with UML

- Classes
- Class relationships
- More on use cases
- An example of using UML
- Sequence diagrams
- State models
- Activity diagrams

Week 5 — System Architectures

- Design purposes
- Software frameworks
- More on data flow diagrams
- ATAM Design and Tradeoffs
- Categorizing system architectures
- Component technology

Week 6 — Object-Oriented Designs
• Design in the Unified Development Process
• Designing against component interfaces
• Specifying classes and functions for design
• Software reuse
• Detailed sequence diagrams and data flow diagrams
• Software reuse
• Standards for detailed design
• Estimating cost of software

Week 7 — Final Exam

Instructor

Jack Polnar
Computer Science Department
Metropolitan College
Boston University
808 Commonwealth Ave Room 250
Boston, MA 02215
jpolnar@bu.edu (mailto:jpolnar@bu.edu)

Office Hours and Questions: I welcome your questions via Online Campus Internal Messages, Discussion area or standard email which I pick-up several times a day. I will also conduct multiple Supplementary Live Sessions each week and welcome your questions there. We can also arrange time to meet one on one through a live office, or a phone call.

Welcome!

My name is Jack Polnar and I will be your instructor for CS682 of Information Systems Analysis and Design. Our team of facilitators and I welcome the opportunity to teach, guide and interact with you through the next 6–7 weeks of fast paced learning of Information Systems Analysis and Design. In this course we will learn and think about how to gather requirements and design IT systems, including many of the challenges and approaches, both conceptually, and hands on. My goal in this course is to show you how exciting and challenging the process of analysis and design is. How it is constantly evolving and impacting our experience both at work, school and even at home!

I received my master's degree in Computer Information Systems with Security Concentration from Boston University MET in 2008. I have taken this course as a student once, just like you are now! I have been teaching, facilitating and helping develop courses here at BU MET Online program since Spring 2006 starting with this exact course! In addition to CS682, I have also been heavily involved with several other courses including CS684, CS669, CS699, CS782 and CS779.

I currently work as a Lead Information Systems Specialist for Newton Public Schools (k-12, Newton MA), a role which
has evolved for me since 1999. From a technical perspective my job revolves around supporting and maintaining our various IT Systems including planning, administration, programming, integration, and data analysis. However much of this job is very organizational. We are constantly evaluating and analyzing our systems, developing modules, aligning them to K-12 strategies of Teaching & Learning. I frequently use the agile approach in developing and building modules and components within our IT systems. I also independently consult developing various business systems using FileMaker and MySQL using the agile approach.

The best way to reach me outside of our many Live Classroom sessions is to email me within the course itself. If the course email is not available or if you need to get a hold of me urgently, you can contact me at my main BU email address. I normally pick up my course and regular email many times per day.

Initial Course Development

This course was originally developed by Dr. Eric Braude. 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.

He 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. His research concerns reliable program construction. Eric has written, co-written, or edited six books, including “Software Engineering” and “Software Design.”

Additional information about Dr. Braude can be found on his BU homepage at http://www.bu.edu/csmet/braude/

Course Resources

Required Course Textbook

Textbook Notes

- Make very sure that you are getting the 7th edition.
- The textbook for this course can be purchased from Barnes & Noble at Boston University (http://bu.bncollege.com/).
- McGraw-Hill/Irwin provides an online learning center (http://highered.mcgraw-hill.com/sites/0073052337/student_view0/index.html) associated with this text. It does not replace the textbook.

Your assignments for this course will be based on the printed version of the textbook. However, you might find it useful to review the case studies, practice quizzes and PowerPoint presentations available for each chapter of the textbook.

Supplemental Material

- You will find a section with supplemental material on the CS 682 Online Campus course homepage.

Other Resources

- For definitions and terms, and for pointing you to references, Wikipedia can sometimes be useful. However, remember that information at Wikipedia is erratically curated, and entries have been manipulated by a variety of people for a variety of reasons. You are free to use Wikipedia as a starting point and as a source of pointers to higher-quality information, but avoid citing Wikipedia (or similar sources that have not been reviewed professionally for veracity) as authorities.
- The UML specifications are at www.omg.org/technology/documents/formal/uml.htm (http://www.omg.org/technology/documents/formal/uml.htm), (but you will find them very dense and formal indeed).
- We will use Visio in this course for UML. However, you are free to use other tools if you wish.

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.

**Study Guide**

### Module 1 Study Guide and Deliverables

**Readings:**
Online lectures
Whitten & Bentley, Primary: pp. 6–16, and 30–33. Secondary: pp. 34–65

**Discussions:**
Optional Discussion 1 postings end January 21 at 6:00 AM ET

**Assignments:**
Assignment 1 due January 21 at 6:00 AM ET

**Assessments:**
Quiz 1 due January 18 at 6:00 AM ET

### Module 2 Study Guide and Deliverables

**Readings:**
Online lectures

**Discussions:**
Optional Discussion 2 postings end January 28 at 6:00 AM ET

**Assignments:**
Assignment 2 due January 28 at 6:00 AM ET

**Assessments:**
Quiz 2 due January 25 at 6:00 AM ET
Module 3 Study Guide and Deliverables

Readings: Online lectures

Discussions: Optional Discussion 3 postings end February 4 at 6:00 AM ET
Assignments: Assignment 3 due February 4 at 6:00 AM ET
Assessments: Quiz 3 due February 1 at 6:00 AM ET

Module 4 Study Guide and Deliverables

Readings: Online lectures
Secondary: Chapters 9 and 10

Discussions: Optional Discussion 4 postings end February 11 at 6:00 AM ET
Assignments: Assignment 4 due February 11 at 6:00 AM ET
Assessments: Quiz 4 due February 8 at 6:00 AM ET

Module 5 Study Guide and Deliverables

Readings: Online lectures
Whitten & Bentley: Primary: pp. 445-467 (Most of this material is not covered in the notes)
Secondary: 468–515 (This material serves as backup to, and gives another perspective on the topics in these notes)

Discussions: Optional Discussion 5 postings end February 18 at 6:00 AM ET
Assignments: Assignment 5 due February 18 at 6:00 AM ET
Assessments: Quiz 5 due February 15 at 6:00 AM ET

Module 6 Study Guide and Deliverables

Readings: Online lectures
Whitten & Bentley, pp. 646–679

Discussions: Optional Discussion 6 postings end February 25 at 6:00 AM ET
Assignments: Assignment 6 due February 25 at 6:00 AM ET
Assessments: Quiz 6 due February 22 at 6:00 AM ET

Important: Final Exam
You will be responsible for setting up your own appointment with an approved proctoring option. This
exam will be three hours in length and will cover material from the entire course. Further information about the testing centers will be forthcoming from the exam coordinator.

---

**Final Exam Details**

The Final Exam is a proctored exam available from **February 26 at 8:00 AM ET to March 1 at 11:59 PM ET**. The Computer Science department requires that all final exams be proctored.

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

**Access to the online discussions and chat feature (but not the module contents), ends on February 26 at 8:00 AM ET and will be unavailable until March 2. 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.

---

**MSDNAA and Visio**

In this class you will use Visio Professional to create UML diagrams (you may use another tool if you wish). You can obtain Visio Professional and many other types of Microsoft software free of charge from the Microsoft Developer Network Academic Alliance (MSDNAA) Program, which allows faculty, graduate and undergraduate students currently enrolled in MET courses to obtain certain Microsoft products free of charge.

You can obtain many types of Microsoft software free of charge from the Microsoft Developer Network Academic Alliance (MSDNAA) Program. By the first day of class your instructor will submit your BU email address to Microsoft to enroll you in the program for the current semester. You will receive an email from the MSDNAA E-Academy License Management System (ELMS) from the address: [elms_support@e-academy.com](mailto:elms_support@e-academy.com).

Some spam filters may direct this email to a junk email folder, so you may want to check your junk email folder or add the address above to your contacts or other white list. The email will provide you with a username and password, and direct you to the MSDNAA site.


If you do not receive your email by the end of the first week, first check your junk email folder and then please follow the instructions at [http://www.bu.edu/metit/hw-and-sw/msdn-academic-alliance-software-center](http://www.bu.edu/metit/hw-and-sw/msdn-academic-alliance-software-center)
Evaluation of Students and Grading

Absorbing and creating IT perspectives will be expected of all students in the class. To attain excellence ("A" work), you will be expected to develop your own analyses and comparisons.

Basis for Grades

There are three components to your grades.

1. Weekly Assignments

Most of the content of the course will be explored through weekly assignments that study actual cases or encourage you to extrapolate from your own organizations and experiences. These are counted equally.

2. Quizzes

These are hand-picked questions similar to what you will find on the assignments, intended to help you with the associated subject matter so that you can get your feedback quicker and apply it to your assignment for that week. We encourage you to start the “quiz” at the beginning of each week so that you are familiar with its question, you can work on it through the entire week up-until the quiz deadline.

3. Final

There will be a three-hour final exam which is similar in format to the homework’s. This provides you the opportunity to show what you have learned from the material, the discussions, and from doing the homework.

Grade Computations

The course grade will be computed from the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Assignments</td>
<td>62%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>6%</td>
</tr>
<tr>
<td>Proctored Final Exam</td>
<td>32%</td>
</tr>
</tbody>
</table>
Optional Live In-Class Presentations | Up to 1% total extra credit

Part of the greatness of our online program is sharing and learning ideas from each other. Our goal is to provide you an opportunity to learn, teach and contribute to learning of others in our class. For those of you who are interested, you can earn up to 1% extra credit based on live-in class presentations which could be based on sharing your previous week’s homework solution, a particular course related concept which you have researched and would like to present, or your experience outside the course which may be relevant to the subject matter of this course. Please contact the instructor or lead facilitator for details and scheduling your presentation.

Evaluation Criteria and Grading Rubric

The weekly assignments are graded according to the evaluation matrices on pages that follow. These are averaged using A=95, A-=90, B+=87, B=85, B-=80 etc.

To get an A grade for the course, your weighted average should be >93. A-=≥90. B+=≥87. B=≥83. B-=≥80 etc.

The quiz 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

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 facilitator 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.

Grading Criteria for Homework

Unless otherwise specified, homework will be evaluated according to the following criteria, weighted equally.
<table>
<thead>
<tr>
<th></th>
<th>D</th>
<th>C-</th>
<th>C+</th>
<th>B-</th>
<th>B+</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clarity</strong></td>
<td>Disorganized or hard-to-</td>
<td>Satisfactory but some</td>
<td>Generally organized and clear</td>
<td>Very clear, organized and persuasive presentation of ideas and designs</td>
<td>Exceptionally clear, organized and persuasive presentation of ideas and designs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>understand</td>
<td>parts of the submission are disorganized or hard to understand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technical Soundness</strong></td>
<td>Little understanding of, or insight into material technically</td>
<td>Some understanding of material technically</td>
<td>Overall understanding of much material technically</td>
<td>Very good overall understanding of technical material, with some real depth</td>
<td>Excellent, deep understanding of technical material and its inter-relationships</td>
<td></td>
</tr>
<tr>
<td><strong>Thoroughness &amp; Coverage</strong></td>
<td>Hardly covers any of the major relevant issues</td>
<td>Covers some of the major relevant issues</td>
<td>Reasonable coverage of the major relevant areas</td>
<td>Thorough coverage of almost all of the major relevant issues</td>
<td>Exceptionally thorough coverage of all major relevant issues</td>
<td></td>
</tr>
<tr>
<td><strong>Relevance</strong></td>
<td>Mostly unfocused</td>
<td>Focus is off topic or on insubstantial or secondary issues</td>
<td>Only some of the content is meaningful and on topic</td>
<td>Most or all of the content is reasonably meaningful and on-topic</td>
<td>All of the content is entirely relevant and meaningful</td>
<td></td>
</tr>
<tr>
<td><strong>Utilization of resources</strong></td>
<td>No useful use of notes, text(s), or Web with incorrect details or applicability</td>
<td>Some useful use of notes, text(s), or Web with mostly correct</td>
<td>Fairly good use of notes, text(s), or Web with correct details or</td>
<td>Very good use of notes, text(s), or Web with correct details or</td>
<td>Excellent use of notes, text(s), or Web with entirely correct</td>
<td></td>
</tr>
</tbody>
</table>
Lateness

We recognize that emergencies occur in professional and personal lives. If one occurs that prevents your completion of homework by a deadline, please make this plain to your facilitator. This must be done in advance of the deadline (unless the emergency makes this impossible, of course), and should be accompanied by particulars that back it up. Additional documentation may be requested. No credit will otherwise be granted for late homework: we want to be fair to everyone in this process, including the vast majority of you who sacrifice so much to submit your homework on time in this demanding schedule.

Discussion Participation

The discussions focus only on the lecture material and associated readings in the textbook for that week and on relating them to real life. Each contribution should number and name the specific lecture section or textbook reading page numbers that it references.

Here are guidelines to the kind of material to post:

- Clarify the cited section
- Respond with substance to a posting on the cited section (It's also good to provide feedback, complements, or just "I agree" even though non-substantive posts are not related to your grade)
- Relate the lecture material and the textbook
- Relate the cited section or textbook reading page(s) to an experience of yours
- Relate the cited section or textbook reading page(s) to a reported incident
- Ask your classmates an insightful question about the cited section

The criteria for participation in the weekly discussions are as follows.

(i) Relevance

This concerns the degree to which your postings are relevant to the stated topic for the module. “A” work consists of postings which all refer to and are entirely relevant to the week's module material. (This criterion should be a straightforward way for you to keep your discussion grade in reasonable territory.)

(ii) Proportion of substantive contributions.

This is the percentage of your on-line contributions that have significant content: 80% would be a good fraction (=B); 95% is definitely excellent (=A). This criterion implies that “more is not necessarily better.” For example, 8
substantial contributions out of 10 will score higher on this criterion than 79 contributions out of 100 with mixed substance – even though you have said more in the latter case. In computing this, we will ignore postings that are obviously not intended to contain content. For example, it's a good thing to complement another student on a useful post and a simple complement does not affect this grade.

Extensive quoted material that can be read from the Internet will fare poorly in this category since it is not the student’s contribution.

(iii) Usefulness of your week’s contributions for the rest of your group.

This evaluates how useful and penetrating the totality of your comments and questions are for the rest of the group. “A” work will result from a significant set of comments and questions that are very useful to your fellow students, and which show that you are developing excellent insight into the subject at hand. This criterion encourages you to be participatory (e.g., by responding to good questions or points posed by others).

Contribute at an even rate of substantive postings throughout the week. Contributions concentrated at the end of the week are far less useful to your classmates because they have little time to absorb and respond.

Long posts are also far less likely to be read by your fellow students and will thus fare poorly in this criterion.

**Lateness**

We recognize that emergencies occur in professional and personal lives. If one occurs that prevents your completion of homework by a deadline, please make this plain to your facilitator. This must be done in advance of the deadline (unless the emergency makes this impossible, of course), and should be accompanied by particulars that back it up. Additional documentation may be requested. No credit will otherwise be granted for late homework: we want to be fair to everyone in this process, including the vast majority of you who sacrifice so much to submit your homework on time in this demanding schedule.

**Final Exam Information**

**How do I access the exam?**

You will not have access to the exam until you are in a proctored facility (either through ProctorCam or testing center). The Final Exam is password protected and will appear in the Assessment icon and the final exam module.

**Note**

A page instructing how to schedule your proctored final exam will be visible by the third week of this course.
How much time will I have?

The proctored final is three hours. Also note:

- You can take this exam only once.
- You cannot save answers to questions after the allotted time has expired; you can only submit the exam with the previously saved answers.

**Important Note**

As you are working on the exam, we recommend that you save your answer every few minutes to prevent loss of data due to an unexpected technical problem. You can continue to edit your saved answers until you submit the exam for grading.

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

- You may bring your textbook and any printed notes, but nothing electronic.
- During your exam you are not allowed to access any electronic devices or external web pages—this includes web pages within your course. You may not bring USB drives, CD-ROMs, phones, iPods, laptops or any digital media to the exam. Once you have accessed your exam, you may not access any other web page.

What is the format of the exam?

- All questions are randomized.
- Each question is weighted; an approximate percentage value is noted.
- The exam questions will display one at a time on your screen.

What is the procedure for answering questions?

- 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.

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>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Email</strong></td>
</tr>
<tr>
<td><a href="mailto:ithelp@bu.edu">ithelp@bu.edu</a> (<a href="mailto:ithelp@bu.edu">mailto:ithelp@bu.edu</a>) Please use “BB Learn Question” in the subject line</td>
</tr>
<tr>
<td><strong>Web</strong></td>
</tr>
<tr>
<td><a href="http://www.bu.edu/tech/web/course-sites/blackboard-learn/">http://www.bu.edu/tech/web/course-sites/blackboard-learn/</a> (<a href="http://www.bu.edu/tech/web/course-sites/blackboard-learn/">http://www.bu.edu/tech/web/course-sites/blackboard-learn/</a>)</td>
</tr>
<tr>
<td><strong>Phone</strong></td>
</tr>
<tr>
<td>(888) 243-4596</td>
</tr>
</tbody>
</table>

Questions

Please, see your proctor if you have any questions.

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.**

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

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

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

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

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

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

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

Q. Failure to comply with the sanctions imposed under the authority of this code.

---

**Important Message on Final Exams**

Dear Boston University Computer Science Online Student,

As part of our ongoing efforts to maintain the high academic standard of all Boston University programs, including our online MSCIS degree program, the Computer Science Department at Boston University's Metropolitan College requires that each of the online courses includes a proctored final examination. By requiring proctored finals, we are ensuring the excellence and fairness of our program. The final exam is administered online, and the access will be available at the exam sites.

Specific information regarding final exam scheduling will be provided approximately two weeks into the course. This early notification is being given so that you will have enough time to plan for 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.
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
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 (mailto: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 cgkardoo@bu.edu (mailto:cgkardoo@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 jaeylee@bu.edu (mailto:jaeylee@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 (mailto: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 (mailto:temkin@bu.edu) or at (617) 358-2566.

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

### 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/ (http://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 (mailto: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:

https://onlinecampus.bu.edu/bbcswebdav/pid-1751417-dt-content-rid-5536343_1/courses/14sprgmetcs682_ol/syllabus/allpages.htm
• **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/](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](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.

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

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

Boston University technical support via email ([ithelp@bu.edu](mailto:ithelp@bu.edu)), the support form ([http://www.bu.edu/help/tech/learn](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](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 (http://www.bu.edu/tech/web/course-sites/blackboard-learn/)
- Check your browser settings with Blackboard's Connection Test (http://www.bu.edu/tech/web/course-sites/blackboard-learn/start/connection-test/)
- Download Most Recent Version of Adobe Flash Player (http://get.adobe.com/flashplayer/)
- Download Most Recent Version of Adobe Acrobat Reader (http://get.adobe.com/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/.

Boston University Metropolitan College