MET CS781 Advanced Health Informatics
2016 Spring Syllabus (Online)

Location: Online only (BU Blackboard Adobe Connect Classroom)
Time: Tuesdays, 7:00 – 9:00 pm EST
Saturdays, 1:00 – 3:00 pm EST

1.   Course Outline and Information

1.1   Course Description

MET CS781 Advanced Health Informatics

This course presents the details of health care data and information, health care information systems (HCIS), and the management of information technology (IT) challenges. The course is organized into six modules. In each module, readings from peer-reviewed and industry literature complement textbook reading. The first part of the course introduces health care regulations, laws, and standards related to health care information along with core concepts of patient safety and data driven medical decision-making. The second part delves into depth with analytical methods and standards for health data, application design, deployment, lifecycle, governance and achieving value. The course has a term project providing students a hands-on experience in HCIS research. To reinforce the lecture material, up to two guest lecturers with many years of experience in health informatics may be invited to share their first-hand experience with students.

1.2   Course Objectives

This course will enable you to:

- Learn regulations, laws, and standards related to health care and information systems
- Learn security and privacy issues related to health information
- Work with various types of health care data, information and standards
- Learn about key issues in application design and human error as it related to IT system
- Understand the process of HCIS acquisition, development, implementation, and support
- Understand the various aspects of managing IT challenges and professional development as it relates to heath informatics

Prerequisites: MET CS580 or instructor approval

1.3   Course Structure

Module	Lecture	Description
Module 1	Lecture 1	Course Intro & Initiatives Affecting for Health IT
Module 1	Lecture 2	Technologies Supporting Health IT
Module 2	Lecture 3	Health Data Privacy and Security

Module 2	Lecture 4	The Human Element in Health IT
Module 3	Lecture 5	Uncertainty in Medical Diagnosis & Decision Making
Module 3	Lecture 6	NLP & Machine Learning
Module 4	Lecture 7	Working with Health Information & Standards
Module 4	Lecture 8	Working with Big Data
Module 5	Lecture 9	Informatics Discipline, Knowledge Management & Professional Development
Module 5	Lecture 10	Human-Computer Interaction & Application Design
Module 6	Lecture 11	System Development Lifecycle
Module 6	Lecture 12	Governance & Assessing Value in Health IT

In addition to above lectures, guest lectures may be included given availability to provide additional perspective on course topics.

1.4 Course Overview

Module 1
- Discuss accreditation, licensure, and certification of health care facilities and how these define the information needs. Understand the legal requirements for managing health records.
- Understand existing and emerging payment models for healthcare and how these affect health information technology use
- Learn about major health reform initiatives affecting the adoption and utilization of health information technology
- Learn about adoption and maturity of various health information technologies
- Understand the various forms of health information and how this may be digitized through the use of health information technology
- Introduce Health Information Exchanges (HIEs) and health data standards
- Learn the major types of administrative and clinical information systems deployed in health care
- Understand the new models of care including Accountable Care Organizations (ACOs), Bundled Payments and Patient Centered Medical Homes (PCMHs)
- Learn the emerging IT trends and the core technologies behind HCIS
- Understand the importance of adopting overall information system architecture

Module 2
- Review privacy regulations and requirements for patient confidentiality.
- Learn the Health Insurance Portability and Accountability Act (HIPAA) security regulations
- Understand the importance HCO-wide security programs and the major threats to the security of health care information
- Appreciate the organizational factors that can affect system acceptance and study strategies for managing change
- Understand the factors important for system support and evaluation, the things that may go wrong during implementation, and the strategies to alleviate problems
- Learn the strategies for effective change management.
- Review the factors that contribute to IT project failures.

- Understand the impact of clinical information systems on patient safety, quality, efficiency, and outcomes and study several practical examples
- Understand the scope and causes of medical error

Module 3
- Understand the theory and process behind medical decision making
- Explain Bayes Theorem and application to health informatics
- Discuss the causes and consequences of uncertainty in medicine
- Learn about various biases and heuristics that affect decision making
- Define and explore big data in medicine
- Introduce current techniques in machine learning and natural language processing
- Review sensitivity, specificity, and evaluation of medical diagnostics and therapies

Module 4
- Review the major types of health care information standards and the organizations that develop or approve them
- Review major terminologies and vocabularies used in health informatics
- Introduce specific standards used to communicate medical data
- Understand concepts related to quality measurement
- Introduce initiative affecting patient access to medical information
- Develop hands-on experience working with medical data

Module 5
- Learn about the concepts of data, information and knowledge
- Learn about the discipline of health informatics
- Introduce key professional and academic societies
- Understand the roles, responsibilities, and functions of the IT department
- Understand the roles and responsibilities of the key IT staff
- Demonstrate the ability to communicate effectively the results of their work to peers and co-workers
- Introduce principles of software and user-centered design
- Introduce and perform basic usability analysis

Module 6
- Understand how a HCO selects a HCIS and the various stages during system acquisition
- Learn the purpose and content of a RFI (request for information) and RFP (request for proposal) in a system acquisition process
- Discuss the problems that may occur during system acquisition
- Learn the system development life cycle (SDLC) and the process that a HCO typically goes through in implementing a HCIS
- Learn various ways to organize IT services and the key attributes of highly effective IT organizations
- Understand complementary strategies, strategy evolution, and governing concepts
- Learn the components of an IT budget and the processes for developing the budget
- Understand IT-enabled value.
- Learn the step involved in IT project value realization.
- Understand why IT investments can fail to deliver returns.
- Review factors that challenge the realization of IT value.

Course Completion
- Complete term research project
- Present research topics to peers and instructor
- Prepare for and take the final exam

2.   Instructor Biography

John D'Amore, M.S.
Phone: (917) 733-3735
Email: jdamore@bu.edu
Office hours: Sunday 1-2pm or by appointment

John D'Amore, focuses on improving healthcare through the intelligent application of clinical and financial data. With over fifteen experience in healthcare, health IT and medical informatics, Mr. D'Amore has been the driving force behind enterprise-wide software solutions and performance improvement projects to boost provider efficiency, revenue and care quality.

Currently, Mr. D'Amore is the Founder and Chief Technology Officer of Diameter Health, Inc., a software company that improves the clinical, operational and financial performance of health providers. The company draws on his prior academic work with new standards for medical interoperability applied to scalable and innovative analytics. Previously as the Vice President of Enterprise Performance Management at Allscripts, Mr. D'Amore was instrumental in the technical and strategic development of Best-in-KLAS software. Before that, Mr. D'Amore served as the Director of Decision Support with Memorial Hermann Healthcare System. During his tenure, the system received the prestigious National Quality Forum award for clinical excellence and shared their success through publications and publications with the *American College of Healthcare Executives, HFMA*, *HIMSS* and *Population Health Management.*

Mr. D'Amore earned a Master's degree in clinical informatics from the University of Texas School of Biomedical Informatics, and a Bachelor's degree in biochemistry from Harvard College. Mr. D'Amore research in medical informatics has been published in peer-reviewed journals, such as the *Journal of the American Medical Informatics Association*, the *American Journal of Public Health* and *Applied Clinical Informatics*. He continues to present as a guest lecturer and invited speaker at regional and national conferences on medical informatics and interoperability.

3.   Course Resources

3.1 Required Books

Trotter, F. and Uhlman, D. (2011). *Hacking healthcare: A guide to standards, workflows, and meaningful use.* O'Reilly Media. ISBN 9781449305024.
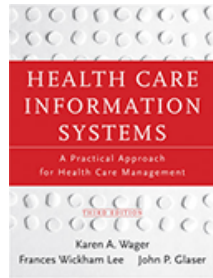
Wager, K.A., Lee, F.W., & Glaser, J.P. (2013). *Health care information systems: A practical approach for health care management* (3rd ed.). Jossey-Bass. ISBN 9781118173534.

In addition to required books, students be required to read a series of online peer-reviewed articles on course topics. These articles will generally be accessible for free through PubMedCentral but may also be accessed through BU Library Link resources.

3.2   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. 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. Go to 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 to email the library or use the live chat feature.

To locate course eReserves, go to 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.

4. Study Guide

Module 1:

- **Required Reading:**
  - o Wager Chapter 3 (pages 67 – 85)
  - o Wager Chapter 6
  - o Wager Chapter 9
  - o Trotter Chapter 1
  - o Five Rights of Clinical Decision Support: http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_050385.hcsp?dDocName=bok1_050385

- **Additional Reading (Optional):**
  - o Meaningful Use http://www.nejm.org/doi/pdf/10.1056/NEJMp1006114
  - o National HIE http://sequoiaproject.org/
  - o Clinical Data Warehousing http://www.bumc.bu.edu/irb/files/PowerPoint/Accessing%20the%20CDW.ppt
  - o Gartner Hype Cycle 1 https://www.gartner.com/doc/2808417/hype-cycle-healthcare-provider-applications
  - o Gartner Hype Cycle 2 https://www.gartner.com/doc/2807718/hype-cycle-healthcare-provider-technologies

- **Discussion 1:** Privacy & Security Topic due by March 22, 2016 7PM EST

- **Assignment 1:** Socio-technical Framework due by March 22, 2016 7PM EST

- **Quiz 1:** Due by March 22, 2016 7PM EST

Module 2:

- **Required Reading:**
  - Wager Chapter 3 (page 85-96 on Privacy)
  - Wager Chapter 11
  - Wager, Chapter 16 (p 522-528 on Managing Change due to IT)
  - Trotter Chapter 7
  - Trotter Chapter 12
  - Patient Safety and Quality: An Evidence-Based Handbook for Nurses
    http://www.ncbi.nlm.nih.gov/books/NBK2673/

- **Additional Reading (Optional):**
  - HIPAA Privacy http://www.hhs.gov/hipaa/for-professionals/privacy/laws-regulations/index.html
  - HIPAA Security http://www.hhs.gov/hipaa/for-professionals/security/index.html
  - Information Security and Privacy in Healthcare: Current State of Research
    http://www.ists.dartmouth.edu/library/416.pdf
  - Unexpected increased mortality after implementation of a commercially sold computerized physician order entry system.
    http://www.ncbi.nlm.nih.gov/pubmed/16322178
  - Emotional Aspects of Computer-based Provider Order Entry: A Qualitative Study
    http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1205605/
  - Lessons From "Unexpected Increased Mortality After Implementation of a Commercially Sold Computerized Physician Order Entry System"
    http://www.ncbi.nlm.nih.gov/pubmed/16882838 (Click on Full Text Access)
  - To Err Is Human, Institute of Medicine
    http://www.ncbi.nlm.nih.gov/books/NBK225187/

    http://www.nap.edu/openbook.php?record_id=9728

- **Discussion 2:** Medical Error due by March 29, 2016 7PM EST

- **Assignment 2:** Medical Error due by March 29, 2016 7PM EST

- **Quiz 2:** Due by March 29, 2016 7PM EST

Module 3:

- **Required Reading / Videos:**
  - Bayes Theorem https://en.wikipedia.org/wiki/Bayes%27_theorem
  - Visualization of Bayes Theorem https://www.youtube.com/watch?v=D8VZqxcu0I0
  - Clinical problem solving and diagnostic decision making: selective review of the cognitive literature (Elstein, Schwarz) http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1122649/pdf/729.pdf
  - Emerging paradigms of cognition in medical decision-making (Patel, Kaufman, Arocha) http://www.j-biomed-inform.com/article/S1532-0464(02)00009-6/pdf
  - Natural Language Processing: An Introduction http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3168328/pdf/amiajnl-2011-000464.pdf
  - Clinical Tests: Sensitivity and Specificity http://ceaccp.oxfordjournals.org/content/8/6/221.full.pdf+html

- **Additional Reading (Optional):**
  - "Bayes' Theorem and the Physical Examination: Probability Assessment and Diagnostic Decision-Making" http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3427763/pdf/nihms277146.pdf
  - Importance of epidemiology and biostatistics in deciding clinical strategies for using diagnostic tests: A simplified approach using examples from coronary artery disease. http://www.sciencedirect.com/science/article/pii/0735109789903616
  - Identifying reasoning strategies in medical decision making: A methodological guide http://www.j-biomed-inform.com/article/S1532-0464(05)00014-6/pdf
  - Evidence-based Medical Decision Making: Deductive versus Inductive Logical Thinking http://onlinelibrary.wiley.com/doi/10.1197/j.aem.2004.02.512/pdf
  - Innovation Generation http://www.amazon.com/Innovation-Generation-Produce-Creative-Scientific/dp/0199892598
  - Big Data In Health Care: Using Analytics To Identify And Manage High-Risk And High-Cost Patients http://content.healthaffairs.org/content/33/7/1123.abstract

- **Discussion 3:** Review of Medical Artificial Intelligence due by April 5, 2016 7PM EST

- **Term Project Topic & Outline:** Due by April 5, 2016 7PM EST

- **Quiz 3:** Due by April 5, 2016 7PM EST

Module 4:

- **Required Reading:**
    - Wager Chapter 10
    - Trotter Chapter 10
    - Trotter Chapter 11
    - An automated technique for identifying associations between medications, laboratory results and problems http://www.j-biomed-inform.com/article/S1532-0464(10)00141-3/pdf
    - Blue Button JS http://www.bluebuttonjs.com/ & http://www.bluebuttonjs.com/sandbox/
    - Are Stage 2 EHRs Ready for Meaningful Use? Findings from the SMART C-CDA Collaborative. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4215060/pdf/amiajnl-2014-002883.pdf

- **Additional Reading (Optional):**
    - Approaching Semantic Interoperability http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3005878/pdf/amiajnl7864.pdf
    - HL7 Fast Health Interoperability Resource https://www.hl7.org/fhir/index.html
    - Introduction to DICOM http://dicomiseasy.blogspot.com/2011/11/introduction-to-dicom-chapter-iii-dicom.html
    - Companion Guide to C-CDA 1.1 http://wiki.siframework.org/Companion+Guide+to+Consolidated+CDA+for+MU2
    - Model Driven Health Tools https://www.projects.openhealthtools.org/sf/projects/mdht/
- **Discussion 4:** Information exchange due by April 12, 2016 7PM EST
- **Assignment 3:** Use of standard and data analysis due by April 12, 2016 7PM EST
- **Quiz 4:** Due by April 12, 2016 7PM EST

Module 5:

- **Required Reading & Videos:**
    - Wager Chapter 12
    - Trotter, Chapter 4
    - What is Biomedical Informatics
      http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2814957/pdf/nihms-139040.pdf
    - Core Content for the Subspecialty of Clinical Informatics
      https://www.amia.org/sites/amia.org/files/AMIA-Clinical-Informatics-Core-Content.pdf
    - NIST Integrating EHRs into Clinical Workflow: Ambulatory Care
      http://nvlpubs.nist.gov/nistpubs/ir/2014/NIST.IR.7988.pdf
    - Graphical Display of Diagnostic Test Results: Comparison of 8 system
      http://jamia.oxfordjournals.org/content/early/2015/03/18/jamia.ocv013.full-text.pdf
    - Watch Introduction Video http://www.healthit.gov/safer/

- **Additional Reading (Optional):**
    - HIMSS Professional Development
      http://www.himss.org/professionaldevelopment/
    - AMIA Background https://www.amia.org/about-amia/mission-and-history
    - Donald Norman The Design of Everyday Things
      http://www.amazon.com/Design-Everyday-Things-Donald-Norman/dp/1452654123

- **Discussion 5:** What is Health Informatics due by April 19, 2016 7PM EST
- **Assignment 4:** Usability analysis due by April 19, 2016 7PM EST
- **Quiz 5:** Due by April 19, 2016 7PM EST

Module 6:

- **Required Reading:**
  - ○ Wager, Chapter 7
  - ○ Wager, Chapter 8
  - ○ Wager, Chapter 15
  - ○ Wager, Chapter 17
  - ○ John Halamka, GeekDoctor
    http://geekdoctor.blogspot.com/2007/12/it-governance.html
    http://geekdoctor.blogspot.com/2010/10/year-of-governance.html
- **Additional Reading (Optional):**
  - ○ A Case Study of the Application of the Systems Development Life Cycle (SDLC) in 21st Century Health Care: Something Old, Something New? http://quod.lib.umich.edu/j/jsais/11880084.0001.103/--case-study-of-the-application-of-the-systems-development?rgn=main;view=fulltext
  - ○ Computational Technology for Effective Health Care: Immediate Steps and Strategic Directions. http://www.ncbi.nlm.nih.gov/books/NBK20636/
- No discussion or assignment but use time for term project
- No quiz but content eligible for final exam

Course Completion

- In-Class Presentation: April 19 or 23, 2016
- Term Project: Due by April 26, 2016 7PM EST
- Final exam: Date TBD

5.   Course Grading Information

5.1   Course Structure

This course is presented as a series of modules covered over two lectures. The course material is grouped in six modules. Modules 1–5 will have one or two lectures, one discussion topic, one quiz, and one assignment. There is also a term project to assess students' understanding and implementing simple Health Informatics solutions. Module 6 will cover additional topics which may be on the final but have no associated assignment or quiz. In addition, Module 6 includes a review session covering key points taught in the course and student project presentations.

- o **Reading Materials** – Introduced in each module.

- o **Quizzes** - This course will have 5 graded quizzes.

- o **Assignments** - This course will have 4 graded assignments.

- o **Discussions** – There are 5 graded discussion forums that involve posting and reviewing other student answers to the discussion topics.

- o **Class Project** – The class project will test students' overall understanding and grasp of the course content.

- o **Final Examination** – The final exam will be comprehensive and will cover material from the entire course. It will be an open-book proctored exam consisting of questions similar to the ones in the quizzes, assignments, and the class project.

5.2   Grade Weighting

The final grade for this course will be based on the following:

- **Assignments (15%)**: 4 formal assignments. Assignments will vary between short written assignments and practical hands-on work with healthcare information.

- **Quizzes (20%)**:

- **Discussions (15%)**: 5 facilitated informatics discussions. Respond concisely (<300 words).

- **Final Exam (25%)**

- **Term Paper (25%):** Outline + 8 – 15 pages

5.3   Letter Grade

The final letter grade in the course will correspond approximately with the following numeric grade range:

A   ≥ 94
A− ≥ 90 < 94
B+ ≥ 86 < 90
B   ≥ 81 < 86
B− ≥ 76 < 81
C+ ≥ 71 < 76
C   ≥ 66 < 71
C− ≥ 61 < 66
D   ≥ 56 < 61
F   < 56

6.   Course Policies

6.1   Assignment completion & late work

1.   All quizzes and assignments have to be submitted by the due dates. Each 24 hours of delay will result in 10% penalty.
2.   Class projects need to be completed and presented by the due date

Academic Conduct Code: http://www.bu.edu/met/for-students/met-policies-procedures-resources/academic-conduct-code/

6.2   Discussion Grading Rubric

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

Criteria	65–69	70–79	80–89	90–94	95–100
Participation	Very limited participation	Participation generally lacks frequency or relevance	Reasonably useful relevant participation during the discussion period	Frequently relevant and consistent participation throughout the discussion period	Continually relevant and consistent participation throughout the discussion period
Community	Mostly indifferent to discussion	Little effort to keep discussions going or provide help	Reasonable effort to respond thoughtfully, provide help, and/or keep discussions going	Often responds thoughtfully in a way that frequently keeps discussions going and provides help	Continually responds thoughtfully in a way that consistently keeps discussions going and provides help
Content	No useful, on-topic, or interesting information, ideas, or analysis	Hardly any useful, on-topic, or interesting information, ideas, or analysis	Reasonably useful, on-topic, and interesting information, ideas, and/or analysis	Frequently useful, on-topic, and interesting information, ideas, and analysis	Exceptionally useful, on-topic, and interesting information, ideas, and analysis
Reflection and Synthesis	No significant effort to clarify, summarize, or synthesize topics raised in discussions			Contributes to group's effort to clarify, summarize, or synthesize topics raised in discussions	Leads group's effort to clarify, summarize, or synthesize topics raised in discussions

6.3   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/.

A Definition of Plagiarism

"The academic counterpart of the bank embezzler and of the manufacturer who mislabels products is the plagiarist: the student or scholar who leads readers to believe that what they are reading is the original

work of the writer when it is not. If it could be assumed that the distinction between plagiarism and honest use of sources is perfectly clear in everyone's mind, there would be no need for the explanation that follows; merely the warning with which this definition concludes would be enough. But it is apparent that sometimes people of goodwill draw the suspicion of guilt upon themselves (and, indeed, are guilty) simply because they are not aware of the illegitimacy of certain kinds of "borrowing" and of the procedures for correct identification of materials other than those gained through independent research and reflection."

"The spectrum is a wide one. At one end there is a word-for-word copying of another's writing without enclosing the copied passage in quotation marks and identifying it in a footnote, both of which are necessary. (This includes, of course, the copying of all or any part of another student's paper.) It hardly seems possible that anyone of college age or more could do that without clear intent to deceive. At the other end there is the almost casual slipping in of a particularly apt term which one has come across in reading and which so aptly expresses one's opinion that one is tempted to make it personal property."

"Between these poles there are degrees and degrees, but they may be roughly placed in two groups. Close to outright and blatant deceit-but more the result, perhaps, of laziness than of bad intent-is the patching together of random jottings made in the course of reading, generally without careful identification of their source, and then woven into the text, so that the result is a mosaic of other people's ideas and words, the writer's sole contribution being the cement to hold the pieces together. Indicative of more effort and, for that reason, somewhat closer to honest, though still dishonest, is the paraphrase, and abbreviated (and often skillfully prepared) restatement of someone else's analysis or conclusion, without acknowledgment that another person's text has been the basis for the recapitulation."

The paragraphs above are from H. Martin and R. Ohmann, The Logic and Rhetoric of Exposition, Revised Edition. Copyright 1963, Holt, Rinehart and Winston.

Academic Conduct Code

I. Philosophy of Discipline

The objective of Boston University in enforcing academic rules is to promote a community atmosphere in which learning can best take place. Such an atmosphere can be maintained only so long as every student believes that his or her academic competence is being judged fairly and that he or she will not be put at a disadvantage because of someone else's dishonesty. Penalties should be carefully determined so as to be no more and no less than required to maintain the desired atmosphere. In defining violations of this code, the intent is to protect the integrity of the educational process.

II. Academic Misconduct

Academic misconduct is conduct by which a student misrepresents his or her academic accomplishments, or impedes other students' opportunities of being judged fairly for their academic work. Knowingly allowing others to represent your work as their own is as serious an offense as submitting another's work as your own.

III. Violations of this Code

Violations of this code comprise attempts to be dishonest or deceptive in the performance of academic work in or out of the classroom, alterations of academic records, alterations of official data on paper or electronic resumes, or unauthorized collaboration with another student or students. Violations include, but are not limited to:

A. Cheating on examination. Any attempt by a student to alter his or her performance on an examination in violation of that examination's stated or commonly understood ground rules.

B. Plagiarism. Representing the work of another as one's own. Plagiarism includes but is not limited to the following: copying the answers of another student on an examination, copying or restating the work or ideas of another person or persons in any oral or written work (printed or electronic) without citing the appropriate source, and collaborating with someone else in an academic endeavor without acknowledging his or her contribution. Plagiarism can consist of acts of commission-appropriating the words or ideas of another-or omission failing to acknowledge/document/credit the source or creator of words or ideas (see below for a detailed definition of plagiarism). It also includes colluding with someone else in an academic endeavor without acknowledging his or her contribution, using audio or video footage that comes from another source (including work done by another student) without permission and acknowledgement of that source.

C. Misrepresentation or falsification of data presented for surveys, experiments, reports, etc., which includes but is not limited to: citing authors that do not exist; citing interviews that never took place, or field work that was not completed.

D. Theft of an examination. Stealing or otherwise discovering and/or making known to others the contents of an examination that has not yet been administered.

E. Unauthorized communication during examinations. Any unauthorized communication may be considered prima facie evidence of cheating.

F. Knowingly allowing another student to represent your work as his or her own. This includes providing a copy of your paper or laboratory report to another student without the explicit permission of the instructor(s).

G. Forgery, alteration, or knowing misuse of graded examinations, quizzes, grade lists, or official records of documents, including but not limited to transcripts from any institution, letters of recommendation, degree certificates, examinations, quizzes, or other work after submission.

H. Theft or destruction of examinations or papers after submission.

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

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

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

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

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

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

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

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

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

6.4 Disability Services

In accordance with University policy, every effort will be made to accommodate unique and special needs of students with respect to speech, hearing, vision, or other disabilities. Any student who feels he or she

may need an accommodation for a documented disability should contact the Office of Disability Services (http://www.bu.edu/disability) at (617) 353-3658 or at access@bu.edu for review and approval of accommodation requests.

6.5 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:

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 the following:

- Respect people's privacy. Don't assume that information shared with you is public; your peers may not want personal information shared. Please check with them before sharing their information.
- Be forgiving of other students' and instructors mistakes. There are many reasons for typos and misinterpretations. Be gracious and forgive other's mistakes or privately point them out politely.
- If a comment upsets or offends you, reread it and/or take some time before responding.

Important Note

Don't hesitate to let your instructor or 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.