

MET CS781 Advanced Health Informatics

2024 Fall Syllabus (Live & eLive)

Location: 635 Commonwealth Ave SAR 104 with online Zoom Class Meetings (eLive)

Time (Live Sessions are Recorded):

Classroom: Wednesdays 6:00-8:45pm ET

Office Hours: After class on Wednesdays and other times as scheduled

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, a guest lecturer, Dr. Lipika Samal, with many years of experience in application development and health informatics will 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 health informatics

Prerequisites: MET CS580 or instructor approval

1.3 Course Structure

Module	Lecture	Description	Date & Location
Module 1	Lecture 1	Licensure, Accreditation, Certification & Quality Measurement	9/4/2024 (all students)

Module 1	Lecture 2	The Human Element in Health IT	9/11/2024
Module 2	Lecture 3	Working with Health Information & Standards	9/18/2024
Module 2	Lecture 4	Uncertainty in Medical Diagnosis & Decision Making	9/25/2024 (Virtual Lecture & Guest Lecture)
Module 3	Lecture 5	NLP & Machine Learning	10/2/2024 (all students)
Module 3	Lecture 6	Working with Big Data & Biomedical Simulations	10/9/2024
Module 4	Lecture 7	Human-Computer Interaction & Application Design	10/16/2024
Module 4	Lecture 8	Methods in Informatics Research & Analysis	10/23/2024
Module 5	Lecture 9	System Development Lifecycle	10/30/2024
Module 5	Lecture 10	Health Data Privacy and Security	11/6/2024 (all students)
<i>No formal class the week of 11/13/2024 (AMIA 2024)</i>			
Module 6	Lecture 11	Informatics Discipline, Knowledge Management & Professional Development	11/20/2024
<i>No formal class the week of 11/25/2022. Happy Thanksgiving!</i>			
Module 6	Lecture 12	Governance & Assessing Value in Health IT & Class Review	12/4/2024
		Review, Course Conclusion & Final Exam	12/11/2024 (all students)

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 the development and calculation of quality measures
- Review the prevalence and causes of medical error
- Discuss the impact of poorly designed systems on user satisfaction and efficiency
- Review background on federal programs affecting health data and quality
- Learn the strategies for effective change management

Module 2

- 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
- Review major informatics vocabularies, terminologies and ontologies
- Introduce specific standards used to communicate medical data
- Review the major types of health care information standards and the organizations that develop or approve them
- Discuss multiple models for health information exchange

Module 3

- Introduce current techniques in machine learning and natural language processing
- Review sensitivity, specificity, and evaluation of medical diagnostics and therapies
- Define and explore big data in medicine
- Develop hands-on experience working with medical data
- Introduce initiative affecting patient access to medical information
- Review methods for data analysis and simulations in healthcare

Module 4

- Introduce principles of software and user-centered design
- Introduce and perform usability analysis
- Review national guidance and practices to improve the safety of health applications
- Understand how to gather information in the evaluation of clinical systems
- Learn techniques for the evaluation of systems, processed and analytics
- Explore research methods in advanced informatics
- Review qualitative and quantitative methods for system evaluation and model performance

Module 5

- Learn the system development life cycle (SDLC) and the process that a HCO typically goes through in implementing a HCIS
- Review privacy regulations and requirements for patient confidentiality
- Review Health Insurance Portability and Accountability Act (HIPAA) security regulations and discuss advanced topics for informatics professionals
- Understand the importance HCO-wide security programs and the major threats to the security of health care information
- Understand the factors important for system support and evaluation, the things that may go wrong during implementation, and the strategies to alleviate problems
- Appreciate the organizational factors that can affect system acceptance and study strategies for managing change
- Learn about how the culture of an organization affects implementation and performance

Module 6

- Understand complementary strategies, strategy evolution, and governing concepts

- Learn the components of an IT budget and the processes for developing the budget
- Learn various ways to organize IT services and the key attributes of highly effective IT organizations
- 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
- Review the factors that contribute to IT project failures.
- Explore 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 and key IT staff
- Demonstrate ability to communicate effectively with peers and co-workers

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: After class on Wednesdays and other times as scheduled

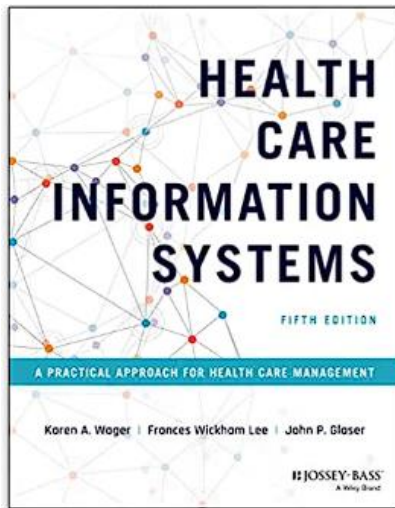
John D'Amore, focuses on improving healthcare through the intelligent application of clinical and financial data. With over twenty years' experience in healthcare and medical informatics, Mr. D'Amore has been the driving force behind enterprise-wide software solutions and performance improvement projects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

Currently, Mr. D'Amore is the President of More Informatics, Inc. He was previously co-founder and President of Diameter Health, a software company focused on data integrity and normalization to improve the clinical, operational and financial performance of health providers. The company drew on his research on medical interoperability standards and quality measurement. The company raised over \$30 million during its growth and was ultimately acquired by Availity in 2022. Prior to that, Mr. D'Amore served as Vice President at Allscripts where he was instrumental in the technical and strategic development of Best-in-KLAS software. Previously, Mr. D'Amore was Director of Decision Support with Memorial Hermann Healthcare System. During his tenure, the system received the prestigious National Quality Forum award for clinical excellence.

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's research in medical informatics has been published in peer-reviewed journals, such as the *Journal of the American Medical Informatics Association*, *Applied Clinical Informatics*, the *American Journal of Public Health* as well as others. Mr. D'Amore has presented at national conferences such as *HIMSS* and *Medical Informatics World* and regularly serves as consultant and invited speaker on health information technology, interoperability and data quality.

3. Course Resources

.1 Required Books



Wager, K. Lee, F. Glaser, J. Health Care Information Systems: A Practical Approach for Health Care Management (5th Edition) 2022 ISBN 978-1119853862

Optional Textbooks:

Braunstein, M. Contemporary Health Informatics (1st Edition) 2014 ISBN 978-1584260318

Braunstein, M. L. (2018). Health Informatics on FHIR: How HL7's New API is Transforming Healthcare ISBN 9783319934136

Trotter, F. and Uhlman, D. (2011). *Hacking healthcare: A guide to standards, workflows, and meaningful use*. O'Reilly Media. ISBN 978-1449305024.

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 Study Guide and Deliverables

- Required reading:**
- Wager 5th Edition: Chapter 1 (p. 9-13) Chapter 2 (p.28-35) & Chapter 3
 - Understanding Clinical Quality Measures: [How CMS is Modernizing Its Approach to Digital Measurement](#) (56 minutes)
 - [Clinical Decision Support: More than Just ‘Alerts’ Tipsheet](#)
 - [To Err is Human: Chapter 2: Errors in Health Care: A Leading Cause of Death and Injury](#)

- Additional reading:**
- [Unexpected increased mortality after implementation of a commercially sold computerized physician order entry system](#)
 - [Emotional Aspects of Computer-based Provider Order Entry: A Qualitative Study](#)
 - [Lessons From “Unexpected Increased Mortality After Implementation of a Commercially Sold Computerized Physician Order Entry System”](#)
 - [2022 MIPS Overview Webinar](#) (89 minutes)

Discussions: Discussion 1 Medical Error due by Wednesday, September 11 at 6:00 pm ET

Assignment: Assignment 1 Quality Measures due by Wednesday, September 11 at 6:00 pm ET

Assessments: Quiz 1 due by Wednesday, September 18 at 6:00 pm ET

- Live Classroom:**
- Wednesday September 4 at 6:00 pm ET
 - Wednesday September 11 at 6:00 pm ET

Module 2 Study Guide and Deliverables

- Required reading:**
- Wager, Chapter 4: Realizing the Digital Health Promise with Electronic Health Records
 - [Health Information Exchange Implementation: Lessons Learned and Critical Success Factors From a Case Study](#)
 - [Bayes Theorem](#)
 - [Visualization of Bayes Theorem](#)
 - [Clinical problem solving and diagnostic decision making: selective review of the cognitive literature](#) (Elstein, Schwarz)
 - [Emerging paradigms of cognition in medical decision-making](#) (Patel, Kaufman, Arocha).
- Additional reading:**
- Braunstein Chapter 5 (Data and Interoperability Standards)
 - [Identifying reasoning strategies in medical decision making: A methodological guide](#)
 - [Evidence-based Medical Decision Making: Deductive versus Inductive Logical Thinking](#)
 - [HL7 Fast Health Interoperability Resource \(Release 4B\)](#)
 - [Introduction to DICOM](#)
 - ["Bayes' Theorem and the Physical Examination: Probability Assessment and Diagnostic Decision-Making"](#)
 - [Big Data In Health Care: Using Analytics To Identify And Manage High-Risk And High-Cost Patients](#)
 - [Approaching Semantic Interoperability](#)
 - [The Meaningful Use Regulation for Electronic Health Records](#)
- Discussions:** Discussions 2 Information Exchange due by Wednesday, September 25 at 6:00 pm ET
- Assignments:** Assignment 2 Socio-Technical Framework due by Wednesday, September 25 at 6:00 pm ET
- Assessments:** Quiz 2 due by Wednesday, September 25 at 6:00 pm ET
- Live Classroom:**
- Wednesday September 18 at 6:00 pm ET
 - Wednesday September 25 at 6:00 pm ET

Module 3 Study Guide and Deliverables

- Required reading:**
- Chapter 11: Data Governance and Analytics and Chapter 13: Emerging Technology Management
 - [“AI revolution in medicine”, The Harvard Gazette article](#) (read and watch video)
 - [The rise of artificial intelligence in healthcare applications](#)
 - [Natural Language Processing: An Introduction](#)
 - [An automated technique for identifying associations between medications, laboratory results and problems](#)
 - [Simulation Shows Hospitals That Cooperate on Infection Control Obtain Better Results Than Hospitals Acting Alone](#)
 - [AHIMA Data Quality Management Model](#)
 - [Data Quality by Office of the National Coordinator for Health IT](#)
 - [How ChatGPT Works](#)
- Additional reading:**
- Braunstein Chapter 10: Big Data Meets Healthcare
 - [S Lohr. For Big-Data Scientists, ‘Janitor Work’ Is Key Hurdle to Insights](#)
 - [Importance of epidemiology and biostatistics in deciding clinical strategies for using diagnostic tests](#)
 - [Virtual Global Health: Computational Modeling and Simulation](#)
 - [The AI Revolution in Medicine: GPT-4 and Beyond](#)
 - [The Emergence of AI for Medicine \(Video\)](#)
- Discussions:** Discussions 3 Review of Medical Artificial Intelligence due by Wednesday, October 9 at 6:00 pm ET
- Assessments:** Quiz 3 due by Wednesday, October 9 at 6:00 pm ET
- Assignments:** Term Project Topic & Outline due by Wednesday, October 9 at 6:00 pm ET
- Live Classroom:**
- Wednesday October 2 at 6:00 pm ET
 - Wednesday October 9 at 6:00 pm ET

Module 4 Study Guide and Deliverables

- Required reading:**
- Wager Chapter 4, HCIS Usability and Safety Concerns (pages 77-87)
 - [NIST Integrating EHRs into Clinical Workflow: Ambulatory Care](#)
 - [Graphical Display of Diagnostic Test Results: Comparison of 8 systems](#)
 - [Electronic health record usability: analysis of the user-centered design processes of eleven electronic health record vendors](#)
 - [Clinical Tests: Sensitivity and Specificity](#)
 - [HealthIT.gov Introduction Video to SAFER Guides](#)
 - [MedStar Health: EHR](#) -- Watch videos on:
 - Norepinephrine Difficult Data Entry
 - MRI Example 1 Complicated Workflow (all others videos optional)
- Additional reading:**
- Donald Norman The Design of Everyday Things: Revised and Expanded Edition ISBN 978-0465050659
 - Steve Krug Don't Make Me Think, Revisited: A Common Sense Approach to Web Usability (3rd Edition) ISBN 978-0321965516
 - [Computational Technology for Effective Health Care: Immediate Steps and Strategic Directions](#)
- Discussions:** Discussion 4 Privacy and Security due by Wednesday, October 23 at 6:00 pm ET
- Assessments:** Quiz 4 due by Wednesday, October 23 at 6:00 pm ET
- Assignments:** Assignment 3 Use of standards and data analysis by Wednesday, October 23 at 6:00 pm ET
- Live Classroom:**
- Wednesday October 16 at 6:00 pm ET
 - Wednesday October 23 at 6:00 pm ET

Module 5 Study Guide and Deliverables

- Required reading:**
- Wager
 - Chapter 7 (pages 143-146)
 - Chapter 8: System Implementation & Support
 - Chapter 12: Privacy and Security
 - [Video on Believing Change in Healthcare](#)
 - [How Do We Heal Medicine](#)
 - [HIPAA Privacy](#)
 - [HIPAA Security](#)
- Optional reading:**
- Gawande, A. The Checklist Manifesto: How to Get Things Right. ISBN: 978-0312430009
 - Pronovost, P, Vohr, E. Safe Patients, Smart Hospitals: How One Doctor's Checklist Can Help Us Change Health Care from the Inside Out. ISBN 978-0452296862
 - Roberta Ness Beyond the HIPAA Privacy Rule: Enhancing Privacy, Improving Health Through Research ISBN 978-0309124997
 - [A Case Study of the Application of the Systems Development Life Cycle \(SDLC\) in 21st Century Health Care: Something Old, Something New?](#)
- Discussions:** Discussions 5 What is Health Informatics due by Wednesday, November 6 at 6:00 pm ET
- Assessments:** Quiz 5 due by Wednesday, November 6 at 6:00 pm ET
- Assignments:** Assignment 4 App/Gamification analysis due by Wednesday, November 6 at 6:00 pm ET
- Live Classroom:**
- Wednesday October 30 at 6:00 pm ET
 - Wednesday November 6 at 6:00 pm ET

Module 6 Study Guide and Deliverables

- Required reading:**
- Wager, 5th Edition:
 - Chapter 9: Assessing & Achieving Value in Health IT
 - Chapter 13: Data Governance and Management
 - Appendix B: Sample Chart and Job Descriptions
 - [What is Biomedical Informatics?](#)
 - [Core Content for the Subspecialty of Clinical Informatics](#)
 - Video: [Why AMIA](#) (2 minutes)
 - Video: [HIMSS: What's Next For Health](#) (2 minutes)
 - Video: [Careers in Health Informatics](#) (watch first 7 Minutes)
- Additional reading:**
- Wager, Appendix A: Overview of the Health Care IT Industry
 - [HIMSS Professional Development](#)
 - [Health Information and Technology Job Descriptions](#)
 - [AMIA Background](#)
- Discussions:** No discussion but use time for class project
- Assessments:** No quiz but content eligible for final exam
- Assignments:** Term project: Students perform a structured argument or original research relating to an informatics topic. Students are required to prepare a report and present to the class via Live Classroom. The report is due by December 4 at 6pm ET.
- In-Class Presentation:** Planned for November 20 or other time arranged with professor
- Course Evaluation:** *Course Evaluation TBD*
- Please complete the course evaluation. Your feedback is important to MET, as it helps us make improvements to the program and the course for future students.
- Live Classroom:**
- Wednesday November 20 at 6:00 pm ET
 - (as needed) Wednesday December 4 at 6:00 pm ET

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.

- **Reading Materials** – Introduced in each module.
- **Quizzes** - This course will have 5 graded quizzes.
- **Assignments** - This course will have 4 graded assignments.
- **Discussions** – There are 5 graded discussion forums that involve posting and reviewing other student answers to the discussion topics.
- **Class Project** – The class project will test students' overall understanding and grasp of the course content.
- **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

Incomplete Grades - The grade of “I” is given to a student who, for reasons explained at the earliest feasible time and deemed acceptable to the instructor, does not complete all of the course work by the end of the semester. An incomplete is only awarded to students who were unable to complete course work as assigned because of extenuating circumstances, and only if at least 50% of the course requirements have been completed. The faculty member will submit with each grade of “I” an [Incomplete Grade Contract](#). Incompletes must be resolved at the student’s initiative within a maximum of one semester. If the necessary work is not completed by one academic semester the grade will be automatically turned into an “F”.

MG Grades - “MG” grades are assigned to students who never attended the course or who stopped attending the course before the last day to drop a course without a ‘W’ grade. “MG” should be used rarely. Faculty members entering an “MG” must include in the “Comments” the reason for the grade and give the last known date the student attended the course.

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	No significant effort to clarify, summarize, or synthesize topics raised in discussions			Contributes to group's effort to	Leads group's effort to clarify,

Synthesis		clarify, summarize, or synthesize topics raised in discussions	summarize, or synthesize topics raised in discussions
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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.