

Course Information

Course Title: Network Forensic Analysis (MET CS 703 EL)

Class Location: Boston University
Charles River Campus
Metropolitan College (MET) Computer Lab
808 Commonwealth Avenue, 2nd Floor
Boston, MA 02215

Class Schedule: September 8, 2012 – December 21, 2012

Instructor: Stuart Jacobs

E-mail: sjjacobs@bu.edu

Instructor Biography

Stuart Jacobs is a Lecturer in the MET CS department with responsibilities for teaching graduate courses on Enterprise Information Security, Network Security and Network Forensics along with advising on security curricula issues. Stuart also serves as an Industry Security Subject Matter Expert for the Alliance for the Telecommunications Industry Solutions (ATIS) and has served as the Technical Editor of the ATIS Technical Report "Information & Communications Security for NGN Converged Services IP Networks and Infrastructure" and as the Technical Editor of ITU-T M.3410, "Guidelines and Requirements for Security Management Systems".

Stuart retired from Verizon Corporation in 2007 where he was a Principal Member of the Technical Staff with responsibility for security architecture development, security requirements analysis and standards development activities. As Verizon's lead security architect, Stuart was the lead engineer for security on numerous Verizon network equipment RFPs and provided security consulting on wireless and wired networks, SS7, CALEA/LI, vulnerability analysis, intrusion detection and systems engineering methodologies. Additionally, Stuart served as Verizon's security subject matter expert for ANSI-ATIS, ITU-T, TMF, OIF, MSF, OMG and IETF activities.

Stuart holds an MSc. degree and CISSP Certification, and is a member of the:

- Institute of Electrical and Electronics Engineers (IEEE) and IEEE Computer Society
- Association for Computing Machinery (ACM)
- International Information Systems Security Certification Consortium (ISC)²
- Information Systems Security Association (ISSA)

Course Description

This course provides an introduction to the methodology and procedures associated with digital forensic analysis in a network environment. Students will develop an understanding of the fundamentals associated with the topologies, protocols, and applications required to conduct forensic analysis in a network environment. Students will learn about the importance of network forensic principles, legal considerations, digital evidence controls, and documentation of forensic procedures. This course will incorporate demonstrations and laboratory exercises to reinforce practical applications of course instruction and will require an independent research paper related to the course topic.

Course Learning Objectives

Upon successful completion of this course you will understand:

- How to look for evidence in both wired and wireless networks
- Perform end to end forensic investigations
- Collect evidence from log files
- Understand the importance of time synchronization
- How to use typical forensic investigation tools
- Follow a scientific approach to investigate network security events and incidents

Course Instructional Methods

This course utilizes a hybrid approach for instruction, which consists of traditional classroom-based instruction combined with self-directed reading and learning exercises facilitated using computer and Internet based technologies. This course will incorporate textbook reading assignments, lecture materials, interactive discussions and laboratory (hands-on) exercises. The hybrid instruction format includes face-to-face interaction during on campus sessions and students should ensure their individual learning styles are consistent with self-directed learning characteristics in order to complete this course of study. The course management system for this course will utilize the Vista online learning environment (<http://vista.bu.edu/>) for e-mail, course announcements, course documents and assignments. Students are expected to check the Vista course site on a regular basis for class announcements and updated course materials.

Course Requirements

Readings

Each lecture has both textbook readings and online lectures. Your professor may assign or suggest additional readings during the running of the course.

Discussions

There are threaded discussions for each lecture. These discussions are moderated by your Instructor. Postings for each discussion should be completed by the assigned due dates. There are also general discussions boards, which are not graded, for you to use to discuss any issues with your classmates. Please see the Discussion Module on the home page for more details.

Assignments

Homework will be assigned during the semester to reinforce topics presented during classroom sessions. Homework assignments and student submissions will be facilitated using the Vista course management system. All homework must be the original effort of the student submitting the assignment. Homework assignments not submitted prior to the due date will not be accepted (without the prior approval of the course instructor) and the student will not receive credit for the respective assignment.

Assignments must be typed, no more than 4 pages in length, use 12 point Times Roman type font, 1" margins on all sides. Place the document file name within the header of each page. Word 2003 files is the required format. If you use Word 2007, you MUST save your assignment document in Word 2003 format.

Laboratory Exercises

Laboratory exercises will be assigned during the semester to reinforce practical applications of course instruction and provide students with an opportunity to develop experience in the configuration and operation of forensic and information security software applications. Laboratory exercises and student submissions will be facilitated using the Vista course management system. All laboratory exercises must be the original effort of the student submitting the exercise. Laboratory exercises not submitted prior to the due date will not be accepted (without the prior approval of the course instructor) and the student will not receive credit for the respective assignment.

Assessments

There are six (6) quizzes that are due throughout the course as identified in the course study guide.

On-campus Sessions

The course will include four (4) class sessions held at the Boston University campus. The class session will include lectures, laboratory exercises, and an interactive exchange of course related concepts and materials. These sessions also provide students with the opportunity to interact with other students and the course instructor. The proposed class session dates are listed below (subject to change based on course and instruction requirements):

On-campus class session	Will occur on
Session 1	September 8, 2012 between 1 PM and 4 PM EDT
Session 2	October 13, 2012 between 1 PM and 4 PM EDT
Session 3	November 3, 2012 between 1 PM and 4 PM EST
Session 4	December 8, 2012 between 1 PM and 4 PM EST

Course Structure

Module 1:

Introduction to Network Forensics and Investigating Logs
Network Traffic Investigations

Module 2:

Web Attack Investigations
Router Forensics

Module 3:

Denial of Service Investigations
Internet Crime Investigations
Email Crime Investigations

Module 4:

Wireless Attack Investigations
PDA Forensics

Module 5:

iPod and iPhone Forensics
Blackberry Forensics

Module 6:

Corporate Espionage Investigations
Trademark and Copyright Investigations
Investigating Sex Related Activities

Final Examination

The course will remain open two weeks after the final exam, so that you can continue discussions and ask any questions about your grades or the course.

Course Materials and Resources

Required Course Books

- **Computer Forensics : Investigating Network Intrusions and Cyber Crime**, EC-Council, ISBN-13: 978-1-4354-8352-1, ISBN-10: 1-4354-8352-9
- **Computer Forensics : Investigating Wireless Networks and Devices**, EC-Council, ISBN-13: 978-1-4354-8353-8, ISBN-10: 1-4354-8353-7
- **Handbook of Digital Forensics and Investigations**, Eoghan Casey ed., Elsevier Academic Press, ISBN 13: 978-0-12-374267-4

These textbooks can be purchased from Barnes and Noble at Boston University.

Students should make sure to purchase new copies of the two EC-Council books so they will be able to access the on-line Student Resources area which will be required for the course.

Suggested Course Books

There will be no reading assignments from the following book. However you will find it a valuable resource to anyone involved in the Information Security area.

Engineering Information Security: The Application of Systems Engineering Concepts to Achieve Information Assurance, Stuart Jacobs, IEEE Press Series on Information and Communication Networks Security, Wiley-IEEE Press; 1 edition, ISBN-10: 0470565128, ISBN-13: 978-0470565124
The above book covers the subject area of information security from an engineering perspective

Recommended Books

There will be no reading assignments from these books. However you will find each to be valuable resources to anyone involved in the Information Security area.

Firewalls and Internet Security, Repelling the Wily Hacker, William R. Cheswick, and Steven M. Bellovin, Addison-Wesley, 1994
The above book is a classic for its very detailed treatment for stateful firewalls and DMZs and is still relevant today.

Practical UNIX & Internet Security, 2nd Edition, ,Simson Garfinkel and Gene Spafford: O'Reilly, 1996
The above book is a classic for its very detailed treatment of general networking security and hardening of unix type operating systems and is still relevant today.

Hacking Expose Network Security Secrets & Solutions, 2nd Edition, Joel Scambray, Stuart McClure, and George Kurtz, McGraw-Hill, 2001
The above book provides an interesting look into those involved in malware and some of the techniques used for breaching targeted systems.

Security Engineering; A Guide to Building Dependable Distributed Systems, Ross Anderson, Wiley, 2001
The above book is an interesting collection of discussions on security engineering and associated challenges.

Computer Related Risks, Peter G. Neumann, Addison-Wesley, 1995
The above book is one of the definitive texts on the basic concepts of what constitutes risks, especially information security risks.

Applied Cryptography, Bruce Schneier, 2nd Edition, Wiley & Sons, 1996
The above book is an excellent source for details on most any encryption algorithm you are likely to encounter. Most any version, starting with the 2nd edition, will be invaluable.

Accommodation of Special Needs

In accordance with University policy, we make every effort to accommodate unique and special needs of students with respect to speech, hearing, vision, seating, or other disabilities. Please notify Disability Support Services as soon as possible of requested accommodations.

Study Guide

The following material is collected here for your convenience but the required readings, discussion particulars, and assignment particulars can be found within the modules, in the "Discussion" section of the course, and in the "Assignment" sections respectively.

Module 1 Study Guide and Deliverables

Readings:	Investigating Network Intrusions and Cyber Crime Preface and Chapter 1 Investigating Network Intrusions and Cyber Crime Chapter 2 Handbook of Digital Forensics and Investigations Chapter 1 Handbook of Digital Forensics and Investigations Chapter 2 Vista Module 1 Text
Discussions:	Please complete the Introduction Discussion before you continue in the course.

Discussion 1 postings due September 24 at 6:00 AM EDT
Assignments: Assignment 1 due September 24 at 6:00 AM EDT
Assessments: Quiz 1 due September 24 at 6:00 AM EDT
Hands-on Projects: Perform the hands-on assignments at the end of the chapter
Submit screen/window snap-shots of the results from running the specified tools (comparable to what is shown in the book) as Word 2003 documents. You do not have to submit evidence regarding the downloading and installation of the tools.

Module 2 Study Guide and Deliverables

Readings: Investigating Network Intrusions and Cyber Crime Chapter 3
Investigating Network Intrusions and Cyber Crime Chapter 4
Handbook of Digital Forensics and Investigations Chapter 10
Vista Module 2 Text
Discussions: Discussion 2 postings due October 15 at 6:00 AM EDT
Assignments: Assignment 2 due October 15 at 6:00 AM EDT
Assessments: Quiz 2 due October 15 at 6:00 AM EDT
Hands-on Projects: Perform the hands-on assignments at the end of the chapter
Submit screen/window snap-shots of the results from running the specified tools (comparable to what is shown in the book) as Word 2003 documents. You do not have to submit evidence regarding the downloading and installation of the tools.

Module 3 Study Guide and Deliverables

Readings: Investigating Network Intrusions and Cyber Crime Chapter 5
Investigating Network Intrusions and Cyber Crime Chapter 6
Investigating Network Intrusions and Cyber Crime Chapter 7
Vista Module 3 Text
Discussions: Discussion 3 postings due October 29 at 6:00 AM EDT
Assignments: Assignment 3 due October 29 at 6:00 AM EDT
Assessments: Quiz 3 due October 29 at 6:00 AM EDT

Module 4 Study Guide and Deliverables

Readings: Investigating Wireless Networks and Devices Chapter 1
Investigating Wireless Networks and Devices Chapter 2
Handbook of Digital Forensics and Investigations Chapter 11
Vista Module 4 Text
Discussions: Discussion 4 postings due November 12 at 6:00 AM EDT
Assignments: Assignment 4 due November 12 at 6:00 AM EDT
Assessments: Quiz 4 due November 12 at 6:00 AM EDT
Hands-on Projects: Perform the hands-on assignments at the end of the chapter
Submit a Word 2003 document that states you have read the specified documents.

Module 5 Study Guide and Deliverables
Readings: Investigating Wireless Networks and Devices Chapter 3
Investigating Wireless Networks and Devices Chapter 4
Vista Module 5 Text

Discussions: Discussion 6 postings due November 26 at 6:00 AM EST
Assignments: Assignment 6 due November 26 at 6:00 AM EST
Assessments: Quiz 6 due November 26 at 6:00 AM EST

Module 6 Study Guide and Deliverables

Readings: Investigating Network Intrusions and Cyber Crime Chapter 8
Investigating Network Intrusions and Cyber Crime Chapter 9
Investigating Network Intrusions and Cyber Crime Chapter 10

Investigating Network Intrusions and Cyber Crime Chapter 11
Vista Module 6 Text

- Discussions:** Discussion 6 postings due December 12 at 6:00 AM EST
- Assignments:** Assignment 6 due December 12 at 6:00 AM EST
- Assessments:** Quiz 6 due December 12 at 6:00 AM EST
- Hands-on Projects:** Perform the hands-on assignments at the end of the chapter
Submit screen/window snap-shots of the results from running the specified tools as Word 2003 documents. You do not have to submit evidence regarding the downloading and installation of the tools.

On-campus Session 1

- Location:** MET CS Department Offices, Computer Lab
808 Commonwealth Ave.
Boston MA
- Meeting Date:** September 8, 2011 between 1 PM and 4 PM EDT
- Preparatory Reading:** Joshua Ojo Nehinbe, "Log Analyzer for Network Forensics and Incident Reporting," Intelligent Systems, Modelling and Simulation, International Conference on, pp. 356-361, 2010 International Conference on Intelligent Systems, Modelling and Simulation, 2010,
DOI Bookmark: <http://doi.ieeecomputersociety.org/10.1109/ISMS.2010.71>
(file: **Log Analyzer for Netowrk Forensics.pdf**)

On-campus Session 2

- Location:** MET CS Department Offices, Computer Lab
808 Commonwealth Ave.
Boston MA
- Meeting Date:** October 13, 2011 between 1 PM and 4 PM EDT
- Preparatory Reading:** To Be Determined later (TBD)

On-campus Session 3

- Location:** MET CS Department Offices, Computer Lab
808 Commonwealth Ave.
Boston MA
- Meeting Date:** November 3, 2011 between 1 PM and 4 PM EST
- Preparatory Reading:** Anita D. D'Amico, John R. Goodall, Daniel R. Tesone, Jason K. Kopylec, "Visual Discovery in Computer Network Defense," IEEE Computer Graphics and Applications, pp. 20-27, September/October, 2007,
DOI Bookmark: <http://doi.ieeecomputersociety.org/10.1109/MCG.2007.137>
(file: **.pdf**)

On-campus Session 4

- Location:** MET CS Department Offices, Computer Lab
808 Commonwealth Ave.
Boston MA
- Meeting Date:** December 08, 2011 between 1PM and 4PM EST
- Preparatory Reading:** TBD

Final Exam:

- Location:** MET CS Department Offices, Computer Lab
808 Commonwealth Ave.
Boston MA
- Meeting Date:** The final exam is at 1:00 PM EST on December 17

Final Exam Details

There will be a proctored Final Exam for this course. The Final Exam is a proctored exam will be held at 1:00 PM EST. The Computer Science department requires that all final exams be proctored. The exam is a three-hour open-book/open-notes exam.

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,

Prof. Lou Chitkushev, Ph.D.

Chairman, Computer Science Department

Boston University Metropolitan College

Course Grading Information Grading Policy

It is important for each student to participate on a regular basis and complete all aspects of this course. This course is designed to include a major portion of learning by interacting (asynchronously) with the other students in the class, and the grade is therefore dependent on this activity.

Overall Grading Percentages

Assignments	20%
Discussions	10%
Quizzes	20%
Hands-on Projects	15%
Proctored Final Examination	35%

Grading Scale

A	94-100
A-	90-93
B+	87-89
B	84-86
B-	80-83
C+	77-79
C	74-76
C-	70-73

Delays

In the case of serious or emergency situations, or if, for any reason, you are unable to meet any assignment deadline, contact your Professor. Assignments are due on the specified date. Extensions may be granted, though only under mitigating circumstances. Assignments submitted after the due date (but not more than 72 hours) will be accepted but assessed a late penalty as follows:

- assignments will be assessed a late penalty of 10 points if submitted within 24 hours after the due date & time
- assignments will be assessed a late penalty of 20 points if submitted within 48 hours after the due date & time
- assignments will be assessed a late penalty of 30 points if submitted within 72 hours after the due date & time
- assignments submitted beyond 72 hours after the due date & time will not be accepted.

Discussion Grading Rubric

Graded discussion periods are held Day 1 of each lecture until 6:00 AM ET on Day 7 of the lecture period. You're certainly welcome to continue a discussion past the grading period, but that additional posted material will not affect your discussion grade. The discussion grading rubric below is the guide we use to evaluate your discussion contributions.

	Discussion Grading Rubric				
Criteria	51–60	61–70	71–80	81–90	91–100
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 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

You should have an even rate of substantive postings throughout the week. (Contributions posted only at the end of the week are far less useful to your classmates.) If your posts are long, they are less likely to be read by others, and this reduces their usefulness. This is the only criterion affected by quantity. For example, if you make no posts, they can't be called useful.

Student Conduct Responsibilities

Notice of Criminal, Civil, and Administrative Responsibility

The legal and authorized use of the materials, software, applications, processes, techniques or services described in this course, presented in written or verbal form, are the sole responsibility and liability of the individual student. The course instructor and Boston University assume no liability as for any damages resulting from unauthorized use of the knowledge gained by student(s) from material covered in this course.

The content and use of the course materials, software, applications, processes, techniques or services described in presentation materials or conveyed verbally by the course instructor may be limited or restricted by federal, state or local criminal and/or civil laws or the acceptable use in corporations, businesses or organizations.

It is the responsibility of the student to ensure that they do not perform any action, process or technique that could violate any criminal, civil or administrative laws, regulations and/or policies.

There shall be no liability on the part of the course instructor for any loss or damage, direct or consequential arising from the use of this information or any action by student(s) that is determined to be in violation of any federal, state and/or local civil or criminal law, or for violation of any administrative regulation, policy or acceptable use policy that results in prosecution, or any loss, to include termination of employment, forfeiture, restitution or fines.

Student enrollment in this course will constitute an agreement to the aforementioned terms and conditions of student responsibilities and liabilities.

Notice of 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/>.

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.**

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.

Citing Referenced Sources

Strict compliance with the Publication Manual of the American Psychological Association (APA) is not required. However all referenced material must be cited consistent with APA methods.

Netiquette

If you've been with us in the online graduate program for a while, you're probably pretty comfortable in this environment. But for those who are new or who may just want a refresher, here are some rules for communicating online which will help us all have a pleasant and rewarding online experience:

1. **Think of your discussion posts as though they were going to be printed in a newspaper.** Thinking of your posting this way should remind us not to write anything that might embarrass us or anyone else in the class. If you make a mistake and wish that you could take a post back, just send an email to the Professor.
2. **Feelings are helpful, but avoid negativity.** Our feelings, including our angst when we don't understand something, our elation when someone else appreciates what we have written, and our sense of satisfaction when we know that we have helped someone else, all help us learn. It's part of being human. Unfortunately another part of being human is the temptation to lash out against someone with whom we disagree. Angry words thrown at someone through the air are gone in a moment, and the apology afterwards can even help the relationship, but angry words thrown around in computer discussion threads or emails hang around forever to haunt us. Disagreement in discussions helps us gain other people's insights and perspective and is critical to learning many of the finer points, so don't hesitate to share your insights and opinions, even if they are very different than your classmates, but always be respectful, particularly in communications with others who may not agree with you.
3. **Remember the golden rule.** Imagine that you are the recipient of your post or email and write what you would like to receive if you were the recipient.
4. **Don't type in all caps.** This is impolite, like shouting in an intimate setting.
5. **Be careful with acronyms.** Some students might not know their meaning. It is always better to spell them out, at least at the first use.
6. **Don't disrupt discussion with unrelated comments.** Wait until the discussion is over to change the topic.
7. **Use the "Water Cooler" for posts that are social or outside the discussion category.** The Water Cooler is helpful for building community, but students are not required to read Water Cooler posts. Putting your general posts in the Water Cooler helps your classmates who are pressed for time and also improves the continuity of the discussion threads.
8. **Be kind to people who may not have broadband connections.** Don't incorporate large graphics, videos or images into graded discussions unless this is necessary. Images in the "Introductions" posts help us build community, so they are encouraged, but these are not graded, so people can skip them if they need to. If you are citing something large from an outside source in a public area like a discussion forum, provide a web address or link and steer others to what you wish them to see.

With your participation and cooperation, we're sure to have some lively, exciting discussions in this course.

Registration Information and Important Dates

Go to www.bu.edu/online/online_course_schedule/important_dates to view the drop dates for your course. Go www.bu.edu/studentlink to withdraw or to drop your course.

Note:

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

*Registration fee non-refundable

Technical Support

Assistance with Vista-related technical problems is provided by the Vista Support staff. To ensure the fastest possible response, please fill out this [Online Form](#).

Form <http://www.bu.edu/help/vista>

Phone (888) 243-4596

Support via email and phone is available Monday through Friday from **9 AM to 5 PM** Eastern Time; additional support hours are provided during exam periods and will be posted on the Vista home page. For solutions to many common issues encountered in Blackboard Vista such as uploading files, problems with audio and video, access to BU library resources, and Java, please consult the following link prior to contacting Tech Support: [Solutions to Common Problems](#).

After-hours Support

Limited help with Vista use and setup issues can be obtained by contacting after-hours Blackboard Support (this is not staffed by Boston University, but by a third party support provider) at **866-207-3339**. More involved issues will be ticketed and followed up on by BU staff during regular business hours. Contact Vista Support staff for assistance with technical problems that relate directly to the Vista system. Examples include:

Problems viewing or listening to video or audio files. Problems accessing Vista's internal email.

Problems viewing or posting comments on Discussion Boards. Problems attaching or uploading files within Vista. Web Resources/Browser Plug-Ins

To view certain media elements in this course you will need to have several browser plug-ins, such as Acrobat Reader, installed on your computer. See your Course Resources page for other specific software requirements for use in this course.

Please click the link below for an overall description of technology requirements necessary to complete this course and/or click the links to install the most recent version of Acrobat Reader.

Check your computer's compatibility by reviewing Blackboard Vista's [Technology Requirements](#).