IT Consulting
Course Web Site: http://cmu.edu/tcinc

Instructor
Joe Mertz
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Office Hours:
- Wednesdays 1:30pm - 3:30pm
- Thursdays 4:00pm - 6:00pm

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Class Schedule: The class schedule including all topics covered, links to presentation slides, readings, work examples, and assignments can be found at http://cmu.edu/tcinc/students/gsched.html.

Class Times: Tuesdays & Thursdays 10:30am-11:50am - Attendance required (see below)

In addition to class twice a week, each student meets with a consulting partner for 3 hours every week at the consulting partner’s location.

Course Goals: This course has service, personal, and intellectual goals. Its service goal is to build the technical capacity of community organizations by providing effective technology consultants. To promote this effectiveness, and to enrich the intellectual preparation of Carnegie Mellon students, the course will teach students how to:

- Establish a professional working relationship
- Quickly assess a complex technical environment and identify problem areas
- Systematically bring structure to unstructured problems
- Communicate technical ideas to an often non-technical audience
- Negotiate with the client acceptable deliverables for the consulting period
- Develop and execute a work plan
- Use writing skills to maintain working documents that describe, plan, persuade, and coordinate work with others
- Reflect and learn from your experience as well as the experience of your colleagues
- Broaden your understanding of the relevance of information systems and computer science.

And finally, students in past semesters have found the experience to be very personally satisfying. Community technology consultants will learn that they can be effective in helping a community organization make better use of its computers, and help its staff and/or volunteers understand more about the technology. Students also often express that it is refreshing to step outside the grind of Carnegie Mellon life and do something worthwhile in the community.

Textbook: There is no textbook for this course. Instead we use the consulting situation itself, experience of peer consultants, readings, web sources, and resources of professional mentors.

Class attendance: Think of class time as a departmental meeting at the consulting firm you work for. Meetings are not optional because that is where information is presented (there is no book). Everyone in the group is responsible for discussing their own consulting situation and bringing insight to others’ situations. Therefore class attendance is required.

Use of laptops in class: Please leave laptops closed. Student use of laptops during class is at the discretion of the instructor. When permitted, they should only be used to enhance class involvement and learning. No email, chat, or other non-class related surfing is permitted. Using mobile phones and other distractions are unprofessional behavior and are forbidden in class. If you disturb the class in any major way, you will be asked to leave the class and will be penalized with an unexcused absence.
Multiple consultants at the same site: In some cases, multiple consultants will be working at the same site. Each student consultant will have a unique client, but the reports that they generate will be done collaboratively. This presents an advantage in having multiple students working on a single report; and a challenge in having to coordinate your work.

Document file type: To facilitate sharing and commenting on documents, all homework assignments and project reports should be submitted as Microsoft Word documents, except where otherwise noted.

Course Requirements:

- Prepare for class by doing the required course readings, prepare for discussion and prepare documents as specified.
- Participate in class discussions.
- Meet with the client every week for two 90-minute visits. Missed meetings must be made up.
- Work with the client to complete a negotiated scope of work.
- Submit weekly brief status reports.
- Produce 3 project reports.
- Peer review others’ reports.
- Produce a professional quality final consulting report
- Complete an exam and evaluation.
- Prepare and deliver a final presentation with your client.

Grading will be based on:

24% - Homework / Preparation for Class
   6% - Status Reports
   5% - Peer Reviews
10% - Project Report 1: Context Analysis
   5% - Project Report 1: Revised Context Analysis
15% - Project Report 2: Revised Analysis of Outcomes & Recommendations
20% - Project Report 3: Final Consulting Report
   5% - Final presentations
   5% - Exam
   5% - Client Evaluations

Professional conduct requires that:
- all appointments be kept or rescheduled in advance when necessary,
- all commitments be kept or renegotiated in advance when necessary,
- and you honor your commitment to produce work on time.

Therefore:
5% of the final grade will be lost for each unexcused absence in class or at the community organization.
10% of an assignment's value will be lost for each day an assignment is late.
20% of the Final Consulting Report's grade will be lost if it is not submitted on time for publication.

Photographs and Media: You will be doing valuable work contributing to the community. Consequently, people like to know about it, and from time to time during the semester, the instructors or others may wish to photograph or videotape you working with your client, or visitors may stop by to view your work. Furthermore, the final presentations that you and your client make will be videotaped for use in future classes. If you prefer not to be photographed or videotaped, please inform the instructors and we will do our best to make sure you are not videotaped nor included in media events.
Acknowledgements and References: Always make sure you acknowledge your collaborators and others who help you in any written or oral assignment. In general, you should be generous in acknowledging contributions of others. Also make sure you include adequate references to publications, communications, and websites that you use to support different claims in your written and oral assignments. Most arguments are made stronger by supporting citations. We have a strict policy on plagiarism in this class.

The following is a very good discussion on plagiarism and how to avoid it, authored by Adjunct Professor Laura Hastings and distributed to Carnegie Mellon Heinz faculty via email:

**Plagiarism**

Cases of cheating and plagiarism, and unauthorized collaboration will be handled in accordance with CMU guidelines. You will get in trouble. What is plagiarism? Plagiarism is defined as "the act of passing off as one's own the ideas or writings of another."

Three simple conventions are presented for when you must provide a reference:

- If you use someone else's ideas, you should cite the source.
- If the way in which you are using the source is unclear, make it clear.
- If you received specific help from someone in writing the paper, acknowledge it.

The following is excerpted from The Georgetown University website: (http://gervaseprograms.georgetown.edu/hc/plagiarism.html)

**They Said It So Much Better. Shouldn't I Use Their Words?**

Yeah, and Michael Jordan can hit a fadeaway jump shot better than you can, and Miles Davis could play a better blues than you do on the trumpet. Learning to write is learning to think.

Sure you won't have a lot of original thoughts, very few of us do. But you will have your original way of looking at things, which is a combination of everything you have done to this point in your life. As you read others' works and ponder, argue with, distill, reconcile yourself to, or reject them, you are growing intellectually, just as you would grow physically by lifting weights or playing the piano.

I thought I can use someone's words if I reference or cite the source. You can, and this happens all the time in academia. It is necessary for building upon the works of others. The trouble comes when you start to use someone else's words all throughout your paper. Pretty soon your paper looks like nothing but a field of quotation marks with a few country roads in between (your few sentences) connecting them. This does not represent very much intellectual work on your part. You have assembled a paper rather than writing one.

**My Friends Get Stuff From the Internet**

So do you, so do I, so does everybody. According to the April 3rd, 1998 issue of Science (and that's a long time ago), there are now as many as 350,000,000 pages on Internet, and with plans in existence for putting everything in libraries in digital form, the accessibility of virtually any text will become a reality in the not-too-distant future. This means that the temptation to start with someone else's words in a word processor and massage them into a paper will become greater and greater.

The practical consequence of all this information in electronic form is that you will be tempted. You'll find out there are sites where you can download whole papers, and you'll be able to find
articles about many topics within a moment's notice. Of course your professors have access to these same tools with the same lightening quick speeds (perhaps even faster with their on-campus Internet access). But that's not the point. You're not in college to play a cat and mouse game with your professor to see if you can fool him or her by using someone else's work. You are in college to hone your mind into a reliable thinking machine that will serve you well throughout the rest of your life. This is the number one skill you are here to obtain: thinking.

A Citation is Not a Traffic Ticket

Before we even get to the idea of citation, let's make sure one thing is clear: if you are using a word-for-word, literal quotation, you have to put the passage you are quoting in quotation marks. If it is a long passage--more than three lines of text in your paper--you should start a new line and indent, putting the citation at the end of the paragraph. Only these two mechanisms are acceptable for indicating quoted material.

There are several systems for citing, or giving reference to, the ideas of others. All professors want you to present complete information. You should give the author's name, the name of the book, the publisher, the date and place of publication, and the page number of the quotation. The whole reference allows the reader to track it down and see what it says for him or herself. It's part of the scientific paradigm that is prevalent in Western societies, which says that convincing evidence about the truth of a hypothesis can be built up only by amassing several independent direct or indirect confirmations of the hypothesis. If I can track down the source, I can see for myself whether I think it is valid.

Citing books and magazines isn't too hard, but what about stuff like web pages? I try to reference the TITLE of the page, at the top of the document (or perhaps at the topic of your browser window), the URL of the page (its location on the web), the AUTHOR of the page if you can find one (or an organization if it appears that an organization wrote the page), the TITLE and DATE of the broader work if you can discern it, and the date on which you visited the web page.

Take care of yourself

Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding recreational drugs and excessive alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Ask for support sooner rather than waiting.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is available to help: visit their website or call 412-268-2922. Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.

If you or someone you know is feeling suicidal or in danger of self-harm, call someone immediately, day or night:

  CaPS: 412-268-2922
  Re:solve Crisis Network: 888-796-8226

If the situation is life threatening, call the police:
  On campus: CMU Police: 412-268-2323
  Off campus: 911