



School of Engineering
Department of Technology Management

TCMG 495
Technical Writing, Communications and Research Methods

Fall 2013

08/26/2013 –12/06/2013

Course Syllabus

Tuesday 9:30am-12:00 pm Full Semester, Room: Tech 163
TCMG495fall13@gmail.com

Instructor: Prof. Christian Bach
Ph.D., MBA, MS
Room: Tech Building 153
cbach@bridgeport.edu

Office Hours:

Monday: 11:30-3:30pm (upon appointment)
Tuesday: 12:00 am -1:00 am, 1:00 – 6:00 pm (upon appointment)
Wednesday, Thursday, 10:00 – 12:00 pm Friday: 10:00 – 12:00 pm (upon appointment)

Course Overview

This course is designed to improve your communications (e.g. oral, written, oral and formal presentation skills and technology, engineering and management disciplines. It will familiarize students with American technical and managerial English and common reports and written communications (such as email, technical reports and memorandums). Course components will review vocabulary, grammar, writing, reading comprehension, speaking and presentation skills to help students succeed in graduate level studies while also gaining necessary job-related skills. Primarily, it will utilize a series of practical “real world” case studies, in-class exercises and team project assignments supplemented with readings in business and technical publications. The students will also be exposed to basic research techniques, library tools and the appropriate ways to use references and citations utilizing the APA (American Psychological Association) reference conventions. It will cover the basics of theory and research design, including how to (1) identify a viable research question; (2) formulate a theory and derive hypotheses; and (3) conceptualize and measure variables.

Course Learning Objectives

The objectives of the course are to:

- To review and to set expectations regarding library research techniques, writing skills, multi-cultural teamwork, and oral communication and formal presentation skills.
- To understand American English expressions and terminology related to technology, engineering and management.
- To practice written business communications: e-mails, reports, proposals, memos, utilizing appropriate business style and mechanics with proper citation forms.
- To develop and expand oral presentation skills.
- To develop awareness of cultural differences in the multinational work force.
- To learn how to participate in/conduct business meetings.

This is a learning-by-doing course -- your agreement to actively participate on a regular basis is a prerequisite for your enrollment in this class. A Chinese proverb says: What I hear, I forget. What I see, I remember. What I do, I know.

Textbooks: Research Methods

Textbook (required):

Robson, C. (2011). Real World Research, 3rd ed. Oxford, UK: Wiley-Blackwell. (Robson, 2011) (Amazon.com \$35) ISBN-13: 978-1405182409, ISBN-10: 1405182407.

Textbooks (optional)

Alred, G. J., Brusaw, C. T., & Oliu, W. E. (2008). The Handbook of Technical Writing, 10th ed. Bedford/St. Martin's. ISBN-10: 0312679459. (Alred, Brusaw, & Oliu, 2011)

Bernard, R. H. (2012). Social Research Methods: Qualitative and Quantitative Approaches. Thousands Oak, CA: Sage Publications. ISBN-10: 1412978548 (Bernard, 2012)

Textbook: English Grammar (optional)

Celce-Murcia, M., & Larsen-Freeman, D. (1999). The Grammar Book: An ESL/EFL Teacher's Course, Second Edition. New York: Heinle ELT. (Celce-Murcia & Larsen-Freeman, 1999)

I. References

1. American Psychological Association, *Publication Manual of the American Psychological Association, 5th Edition*. American Psychological Association, 2001.
2. Azar, Betty S., *Chartbook: A Reference Grammar, 3rd Edition*. Longman Publishing Group, 1999. ISBN 0139587039.
3. Guffey, Mary Ellen, *Business Communication: Process & Product, 6th Edition* South-Western Cengage Learning, 2008. ISBN 0-324-57868-7.
4. Tufte, Edward, *The Visual Display of Quantitative Information, 2nd Edition*, Graphics Press, 2001. ISBN 10: 0961392142.

Handouts from Blackboard: <http://bb.ctdlc.org>.

The UB book distribution system is for you to order the books online at: www.bridgeportbookstore.com or at the UB Bookstore on the main campus in Bridgeport.

Course Requirements

1. Class Attendance, Participation, Punctuality, Cheating and Plagiarism:

On-time attendance at each class session is expected. Excessive lateness will impact your grade negatively. Class lectures complement, but do not duplicate, textbook information. Together students and instructor will create a learning organization. A significant portion of your learning will accrue through the constructive and respectful exchange of each other's ideas, participation and search for alternative solutions. You must be actively engaged in class discussions to improve your analytical, quantitative and communication skills.

Cheating and plagiarism is absolutely unacceptable in any guise. The first offense will result in a warning and documented by the instructor. The second offense will result in an "F" for the course. Cheating and plagiarizing means using the work of others as your own. Copying homework, using papers from the Internet, any talking or looking around during exams and allowing others to look at your exam papers are examples of cheating. Copying other people's or author's written work without proper citations and references is considered plagiarism.

Be certain that your travel arrangements do NOT conflict with any of your team or individual presentations.

2. Preparation, Deadlines and Late Policy:

Late assignments will be **penalized 20% for each class day past the deadline**. No excuses will be accepted.

3. Homework:

The syllabus identifies both the oral, written and math homework assignments. Each written assignment should be typed and only one or two pages long. It will be collected at the *end* of class so that you may refer to them during class discussions.

Math assignments may be handwritten. You must show all work and explain any notation you use that is not covered in class.

4. Academic Article or Case Analysis:

All students are required to read and submit written case studies. Students must be prepared to discuss all cases in class. Each case study will require you to:

1. **Title/Topic** - State the title or selected topic
2. **Summary** - Summarize the key issues and facts of the case
3. **Questions** – Formulate and Answer four (4) questions associated with the case
4. **Recommendations** - Make recommendations on how to use the research method
5. **In-text Citations: APA style**
 - a. **Cite a Research Method Book: e.g. (Bernard, 2000)**, for example after summary (2.)

- b. **Cite 2 academic articles:** take one direct quote (authors' opinion, argument, finding, assumption, issue, etc.) and use it properly in your homework
6. **Lessons Learned** - Formulate the lessons you learned from the case
7. **Question for Class** – Formulate one question on the case that you would like to have discussed in class
8. **References:** create Endnote library with full references in APA style

Important: Make sure your case covers **all 8 points** above in separate sections and each question is answered separately! For each missing point 0.5

5. *Individual Academic Report / Team Project on a Research Method with Case/Article Analysis:*

Each student will prepare a written academic report (3000 – 4000 words, 12 point, Times New Roman) on a research method topic. Students collect 3 academic journal articles on the topic of their choice and write a report on the authors' empirical findings and opinions about the topic and use real world cases (e.g. from Armstrong/Kotler textbook) to discuss the selected research method factors and concepts (usefulness, pro/cons, etc.) while stating their own opinions, arguments, recommendations and conclusion. An executive summary will be presented to class using 1-2 Power Point Posters.

You may select from the suggested topics listed in the syllabus or submit your own topic for approval by the instructor. **The paper must be well written, typed and page numbered, be supported by research, contain references and be consistent with graduation from a graduate program.** All papers must be based on a real company or company case study.

You can use articles that have been distributed by the instructor. All sources (**pages** from articles, books, web pages, etc.) you are using for the paper **must be cited in-text including page numbers** and be references at the end of the paper in APA style.

The Report must contain (3000-4000 words, or more):

The Individual Research Method / Team Project paper consists of following sections:

In the general part, you will the underlying Philosophy of Research Methods. You must cite 20-30 journal articles in the text and in the Endnote library. You may use the references supplied in the assigned books and articles (e.g. in the Kerlinger book on page 21 there are 7 journal articles and 1 book as references mentioned, which you may use).

Your assignment is to either find journal articles that contain cases that cover your assigned Research Method, to find journal articles/books that contain the Research Method of your assigned case/article.

Your paper must include following sections:

Write a well written section in your own words in which you are commenting on your readings and quotes you may have taken from academic articles or books:

The Report must contain (3000-4000 words, or more): Meeting minimum requirements will result in a B+.

1. **Title** - page
2. **Table of Content**
3. **Structured Abstract** (no references), see example at:
<http://www.emeraldinsight.com/journals.htm?issn=2040-8269&volume=33&issue=11&articleid=1886418&show=abstract>
4. ***Write a summary of following 3 articles:** (LePine & Wilcox-King, 2010) and (Eisenhardt, 1989)/(Dyer & Wilkins, 1991) – *instructional, not part of a real paper
5. **Introduction/Literature Overview, Importance of Research** (20-30 references)
Write an introduction about a Research Method of your choice
 - a. Action Research

- b. Case Study Research
 - c. Ethnography
 - d. Grounded Theory
 - e. Emic/Etic Research
 - f. Etc.
6. ***Write a summary of Chapter 1** (Kerlinger & Lee, 2000) **“Scientific Method”** (add/use 5+ references)
 - a. What is the **Scientific Method**? (300-500 words from quoted material and comment on quoted material in your own words)
 - b. Collect and quote definitions and discuss underlying Philosophies
 - c. Make a table of definitions you have found in articles (use quote and cite with page number)
 7. ***Write a summary of Chapter 5, pages 99ff** (Kerlinger & Lee, 2000) **“Relations”** (add/use 5+ references)
 - a. What are **Relations**? (300-500 words from quoted material and comment on quoted material in your own words)
 - b. Write about dependent and independent variables of the model on page 99
 - c. Collect and quote definitions and discuss underlying Philosophies
 - d. Make a table of definitions you have found in articles (use quote and cite with page number)
 8. ***Write a summary of the Research Methodology sections of Irani (2002) and Bailey (2008):** (add/use 5+ references)
 9. **Research Methodology/design/approach:** Write a Research Method section as in Irani (2002), Bailey (2008) for your paper
 Use following articles/books: see folder on BlackBoard “Research Method Articles Individual project”
 Review-Centric Research (LePine & Wilcox-King, 2010), conceptual research (Meredith, 1993), (Dreher, 2000), action research (Winter, 1987), case study research (Perry, 1998), (Eisenhardt, 1989), (Yin, 2003), grounded theory, ethnography (Schultze, 2000), emic/etic research etc.
 10. **Build Real World Model and select Goal/Factors from Irani (2002) and Bailey (2008):** (add/use 5+ references)
 - a. Use file “Paper structure 495” on BlackBoard
 11. **Explanation of Model and** analytical Reflection on its factors and goal (Schön, 1983)
 At least one article must be from the journal “Qualitative Management Research (Emerald)”, or “Organizational Research Methods” (Sage), or “Quantitative and Qualitative Methodologies” (Emerald)
 - a. ”
 - b. Explain each causal link in the model (explain each hypothesis, its virtue, importance and impact)
 - c. Explain the causal impact of each factor (independent variable) on the goal/objective (independent variable)
 - d. Define the independent and dependent variables by citing two or more references)
 12. **Importance of Model/Research and Potential Impact on** Organization/Society/Recommendations/Implications
 - a. Persuasively describe importance of model in your own terms
 13. **Conclusion/Discussion** (including: Lessons Learned, Impact on Organization/Society)
 14. Properly **use and cite in the text <30 references (B+/A- grade) in the paper – > 4000 words and >40 references are expected for receiving an A grade**
 15. **References** listed in mandatory APA-style.

*instructional, not part of a real paper

Kerlinger, F. N., & Lee, H. B. (2000). *Foundation of Behavioral Research, 4th ed.* (4th edition ed.). New York: Thomson Learning.

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action.* New York: Basic Books.

Abstract Example:

Purpose – This paper aims to review how current policy instruments drive (or not) environmental innovation and, by doing so, to reinvestigate the relationship between innovation and regulation.

Design/methodology/approach – A comprehensive literature review on innovation and environmental regulation created a theoretical foundation of the paper. Using the grounded theory, a model was developed and evaluated

using interviews. This is a timely topic as the new shape of recent environmental regulation appears to be fairly strict. A new model is presented to encapsulate highly dynamic interaction of environmental innovation and regulation to provide results that reflect on the present innovation behavior and its implications.

Findings – The model highlights various diffusion pathways that are triggered by the main three drivers of innovation namely government (regulation), market (competition and cost) and technology which has the possibility of an autonomous diffusion.

Research limitations/implications – The empirical data are limited to 13 qualitative experts' interviews within industry, consultancies and governmental departments.

Practical implications – The suggested model is particularly useful for policy makers to better understand the innovation dynamics and its diffusion pathways to design smarter regulations that incentivize rather than force organizations to comply with regulation.

Originality/value – The paper shows how regulation drives (or not) innovation and how various diffusion pathways can be used by external stakeholders to direct and promote innovation.

See: <http://www.emeraldinsight.com/journals.htm?issn=2040-8269&volume=33&issue=11&articleid=1886418&show=abstract>

Each student will **present the executive summary of their paper to the class** and submit:

1. **Written Academic Report (3000-4000- words)**
2. **Upload into TrunItIn**
3. **Power Point poster**
4. **Email pdf files of 3 articles and other sources (web pages, etc.)**
 - **Cite sources properly in-text including page numbers**
 - **List references (articles, books, web pages, etc.) in mandatory APA style at the end of the paper**

Students are required to upload their papers into Turn-It-In before submission.

Journals

Qualitative Management Research (Emerald)
Organizational Research Methods (Sage)
Quantitative and Qualitative Methodologies (Emerald)
Journal of Business & Economic Statistics (JSTOR)
Electronic Journal of Business Research Methods (UBEureka)
Organizational Research Methods (UBEureka)

Evaluation

Class Participation, News & Attendance	10 %
Team Project	20 %
Homework Assignments	10 %
Academic Assignments	20%
Individual Academic Report and Presentations	<u>40 %</u>
	100 %

Course Structure

Lecturing is only one of the three approaches used in this course. Knowledge will be acquired through facilitated case discussion, student and team presentations. Students are expected to engage actively in preparing for and presenting the case materials. For completing the assignment and project, students may need to do additional research, and look for information and knowledge that is not covered by the textbook and the lectures. It is assumed

that a major learning objective for this course is to cultivate students' capability in searching, identifying, evaluation, using, and integrating relevant knowledge that may or may not be provided in the class through library, the Internet and other sources.

Research Methods: Schools, Philosophies, Approaches, Tools

Schedule & Assignments

Note: this is a working outline, and may be revised to meet the needs of class participants.

Date	Topics and Assignments	Reading
<p>Session #1 Aug27,13</p>	<p>Course set up</p> <ul style="list-style-type: none"> - Submission is mandatory due at each Saturday Midnight for all Posters, Assignments and Homework: TCMG495fall13@gmail.com 20% grade reduction for submission until Sunday midnight; 50% for submission after Sunday midnight. - Material will be uploaded on BlackBoard – be on time - to learn and practice of individual and team discipline and responsibility! Being late is not acceptable in any form of successful business! - There are Poster and Paper samples from other students posted on BlackBoard. Remember that these are proprietary and the intellectual property of the student. As always in business, it is your responsibility to respect others property! <p>Individual submission</p> <ul style="list-style-type: none"> 1Poster: English Grammar (optional) 1Poster: Research Method article 3Assignments Individual paper (A1-A4) 1Final Individual paper (A5) 1Poster of Final Individual paper (A5) 10 Exercises SAS <p>Assignments: submit to TCMG495fall13@gmail.com</p> <p>1 Individual Academic Report (Term Paper) on Research Method including a Model (10-12 pages, 40+ references)</p> <p>A1: in-class assignment: Exercise 1, Endnote (1 reference) A2: in-class assignment: Introduction (10+ references) A3: in-class assignment: Model and references in Paper structure A4: in-class assignment: Research Method section A5: Mid-term exam Complete Paper structure (preliminary final paper)</p> <p>Students must submit “in-class assignments” during class! A1-A4 in session 6.</p>	
<p>Session #2 Sep02,13</p> <p>A1: in class Endnote</p>	<p>Introduction to Graduate Studies: Objectives, Expectations, Do’s, Don’ts, Careers, Formation of Teams</p> <p>Installation of software</p> <p>A1: in-class assignment: Exercise 1, Endnote (1 reference) All students must submit assignment during the session.</p> <p>Endnote and Library Exercise, write section ch1 and ch5 p.99 (Kerlinger & Lee, 2000)</p>	

<p>A2: Model and Paper-Structure (Irani case)</p>	<p>A1: Write section: Ch1 (Kerlinger & Lee, 2000) A1: Write section: Ch5 (Kerlinger & Lee, 2000) page 99 ff.</p> <p><u>Assignment2: submit the word file and Endnote file (.enl)</u></p> <p><u>Go to Blackboard and open Folder:</u> “Model Example IS Implementation_495x”</p> <ul style="list-style-type: none"> - download and open all files - read highlighted section in Irani2002 and Bailey2008 articles - create your own model with 4 factors, 1 goal and 5 references with page number - copy/paste the phrases that contain the factor/goal into the PowerPoint by replacing the existing ones - argue why the factors/goal are important for enhancing the competitive advantage or the performance of an organization - copy/paste A1 into the Appendices <p><u>Journals</u> Qualitative Management Research (Emerald) Organizational Research Methods (Sage): (Ketchen et al., 2008b) Quantitative and Qualitative Methodologies (Emerald: (Mangan et al., 2004) Journal of Business & Economic Statistics (JSTOR)</p> <p><u>Guidelines for Poster presentations</u></p> <ol style="list-style-type: none"> 1.) Create new or recreate tables and figures in chapters/articles in PowerPoint and add material from other articles 2.) Why is your topic/research method important 3.) Use examples to explain <p><u>Introduction to Oral Presentation Skills:</u> (1) Importance of Audience Attention, (2) Body Language, (3) Vary Voice (no monotones), (4) Presentation Slide/Poster in PowerPoint – Rule of 7 on 7; Font Size; References, Contents, Executive Summary, etc,</p> <p><u>Introduction to Written Communication:</u> (1) Overview of Documentation, (2) Email, (3) Letters, (4) Technical Proposals and Reports, (5) Policy Statements</p>	
<p><u>Session #3</u> Sep09,13</p> <p>A2</p>	<p>1) Science and the Scientific Approach; 2) Ethics and Communication; Cross-Cultural Understanding (1) Styles of communicating, (2) Vocabulary as indicators of character, (3) Ethics, Integrity and Honesty, (4) Cross-cultural teams</p> <p><u>A2: in-class assignment: Introduction section:</u> Write an introduction section on your topic and use Endnote and produce 10+ references.</p> <p><u>Go to Blackboard and open Folder:</u> “Model example Customer Satisfaction JSTOR_495”</p> <ul style="list-style-type: none"> - download and open all files - use Customer Satisfaction word file and PowerPoint as example and template - go to JSTOR 	

	<ul style="list-style-type: none"> - select any topic - find and download 5 articles - create your own model and paper structure - speed is important, do not take more than 2 hours to build a model and paper - factors/goal/paper can be changed at any time during the semester <p><u>Team Posters: Scientific Research Method, (20min)</u> 3s: Team1: ch1 (Kerlinger, 1973) 3s: Team2: ch5 (Kerlinger & Lee, 2000) Assigned Teams create and present two or more Posters for each chapter.</p> <p><u>Discussion</u></p> <ul style="list-style-type: none"> - Research Method Section in articles - Scientific Approach - dependent and independent variables, hypothesis - standard causal model 	
<p><u>Session #4</u> Sep16,13</p> <p>A2:Model</p>	<p>1) Real World Enquiry and the Reflective Practitioner 2) Drafting Documents (1) Pre-writing strategies, (2) Introductions, (3) Content/context, (4) Audience, (5) Purpose, (6) Sources of information, (7) Plan of development</p> <p><u>A3 in class assignment: Build Causal Model with 1 goal and 4 Factors using 5 academic journal articles: Irani (2002) and Bailey (2008)</u></p> <p><u>Team Posters: Research Method, (20min)</u> 4s: Team3: ch1 (Robson, 2011) 4s: Team4: ch2 (Schön, 1983) Assigned Teams create and present two or more Posters for each chapter.</p> <p><u>Discussion</u></p> <ul style="list-style-type: none"> - Paper structure - Sections of an article - References and Endnote library 	
<p><u>Session #5</u> Sep23,13</p> <p>A3: paper structure</p>	<p>1) Social Research and the Function of Executives 2) Conclusions, Formal Presentations and Conducting Effective Meetings (1) Roles, Responsibility and Commitment of Team Members, (2) Recommendations/solutions, (3) Significance or Consequences, (4) Plan of Action, (5) Formal Presentation Guidelines (e.g. PowerPoint, Ad hoc, What to focus on if your presentation time is cut by 50% when you get into a meeting), (6) Minutes of Meetings</p> <p><u>A4: in-class assignment: Research Method section</u> Write a Research Method section.</p> <p><u>Team Posters: Research Method, (20min)</u> 5s: Team5: ch2 (Robson, 2011) 5s: Team6: ch2 (Barnard, 1968) Assigned Teams create and present two or more Posters for each chapter.</p>	

	<p><u>Discussion</u></p> <ul style="list-style-type: none"> - Paper structure - Sections of an article - References and Endnote library 	
<p><u>Session #6</u> Oct01,13</p>	<p>1) Developing Ideas and the Working Role of Managers 2) Library Research (1) Overview of Library Resources, (2) Accessing Online Resources, (3) Journal Access</p> <p><u>Team Posters: Research Method, (20min)</u> 6s: Team7: ch3 (Robson, 2011) 6s: Team8: ch4 (Mintzberg, 1973) Assigned Teams create and present two or more Posters for each chapter.</p> <p style="text-align: center;">A1-A4 Exam</p> <p style="text-align: center;">(each student submit A1-A4 for grading)</p> <p>submit Exercises for grading (A1-A4) – (this is not your paper and not the mid-term exam-use A5 template); A5 template is not your final paper! Deadline midnight this day.</p> <p><u>Discussion</u></p> <ul style="list-style-type: none"> - Research Methods - Case Study Research, Ethnography, Action Research, Grounded Theory 	
<p><u>Session #7</u> Oct08,13</p>	<p>1) Research Design and Tacit Knowledge 2) Technical Analysis: (1)Summarizing Technical Papers, (2) Preparing Technical Reviews, (3) Gathering Technical Information for Reports</p> <p><u>Team Posters: Research Method, (20min)</u> 7s: Team1: ch4 (Robson, 2011) 7s: Team2: What is tacit knowledge? (Polanyi, 1966) Assigned Teams create and present two or more Posters for each chapter.</p> <p><u>Discussion</u></p> <ul style="list-style-type: none"> - Data collection methods - Focus groups, interview, survey, observations 	
<p><u>Session #8</u> Oct15,13</p>	<p>Experiments and Relational Designs</p> <p><u>Team Posters: Research Method, (20min)</u> 8s: Team3: ch5 (Robson, 2011) 8s: Team4: ch6 (Robson, 2011) Assigned Teams create and present two or more Posters for each chapter.</p>	

	<p><u>Discussion</u> - Research design options</p>	
<p><u>Session #9</u> Oct22,13</p> <p>A5: Paper</p>	<p><u>Assignment4:</u> Preliminary Paper including all sections</p> <p>Individual Article Poster Presentations: Team 1-4 <u>Email/Submit:</u> electronic copy of Individual Paper and Poster</p>	
<p><u>Session #10</u> Oct29,13</p>	<p>Individual Article Poster Presentations: Team 5-8 <u>Email/Submit:</u> electronic copy of Individual Paper and Poster</p> <hr/> <p style="text-align: center;">Mid-Term Exam (submit paper)</p> <p style="text-align: center;">(each student submit <u>complete paper</u> with full structure).</p> <hr/>	
<p><u>Session #11</u> Nov05,13</p>	<p>Proposals (RFPs): (1) Planning the proposal, (2) Researching the proposal, (3) Drafting the proposal</p> <p><u>Team Posters: Research Method, (20min)</u> 11s: Team5: ch7 (Robson, 2011) 11s: Team6: ch8 (Robson, 2011) Assigned Teams create and present two or more Posters for each chapter.</p> <p><u>Discussion</u> - Individual Papers Each student is prepared to talk about the individual paper</p>	
<p><u>Session #12</u> Nov12,13</p>	<p><u>Team Posters: Research Method, (20min)</u> 12s: Team7: ch9 (Robson, 2011) 12s: Team8: ch10 (Robson, 2011) Assigned Teams create and present two or more Posters for each chapter.</p> <p><u>Discussion</u> - Individual Papers Each student is prepared to talk about the individual paper</p>	
<p><u>Sessions #13</u> Nov19,13</p>	<p>Final Presentation: Team 1-4 (30 min)</p>	
<p><u>Sessions #14</u> Nov26,13</p>	<p>Final Presentation: Team 5-8 (30 min)</p> <hr/> <p style="text-align: center;"><u>Submit:</u> Individual Paper (final) Friday 06. December 2013</p>	

Session #15 Dec09,13	Final Exam (optional)	