Texas A&M University-Commerce

College of Science & Engineering
Department of Engineering & Technology

Course Syllabus-Fall Semester, 2015
TMGT 510 01W (81496)

Course Title: **Management of Technology in Organizations** (CIP: 1506120019)
Three (3) semester credit hours.
Course Dates: **August 31, 2015 to December 18, 2015**

This section of this course is 100% online. No face-to-face meetings are conducted.
All correspondence is via email with the Professor.

Professor:	**Dr. Jerry D. Parish, CSTM**	
Contact Information:	*Office Location:*	Charles J. Austin Engineering & Technology Building
	Email Address:	jerry.parish@tamuc.edu
	Contact Telephone:	903-886-5474
Virtual Office Hours:	Online Office Hours: Monday-Thursday/Times online will vary each day.	

On-campus office visits are available by appointment only.

Call 903-886-5474 to schedule an on-campus appointment.

You will be required to present a valid and current TAMUC student ID at the time of your scheduled on-campus appointment.

General Course Information

Course Description: Examination of cutting-edge engineering and technology concepts, tools and technologies that apply to contemporary technology-intensive organizations. Course may include active study of organizational structures, effective management processes and controls, ethical practices, project evaluation, technology-oriented teams, innovation and environmental quality. Extensive reading, researching the body of literature/knowledge related to the course content and completion of original writing assignments required of the student.

Prerequisite: TMGT 595 or concurrent enrollment or permission of Department Head.

Textbook (Required):

Management of Technology
Written by: Hans J. Thamhain
Published by: John Wiley & Sons
ISBN: 13:978-0-471-41551
2005

Reference Sources:

- The Association of Technology, Management, and Applied Engineering
  www.atmae.org
- **Publication Manual of the American Psychological Association (APA)**
  6th Edition-2010   ISBN: 10: 1-4338-0561-8

Student Learning Outcomes (SLO)

Student Learning Outcomes define what you should know and be able to do as a result of your successful completion of this course of study. All of the activities that constitute this course are designed toward your accomplishment and mastery of that goal.

- **Student Learning Outcome #1:** The learner based on their readings, research and study of the current body of literature will be able to compose, analyze and report their research findings in an original literature review paper titled: **Common Principles and Practices Used to Successfully Manage the 21st Century Technology-Intensive Organization.**
- **Student Learning Outcome #2:** The learner based on their readings, research and study of the current body of literature will be able to compose, analyze and report their research findings in an original literature review paper titled: **Project Management Processes Common to Technology-Intensive Organizations.**
- **Student Learning Outcome #3:** The learner will be able to construct original literature review papers that comply with the published course writing guides and the **Publication Manual of the American Psychological Association (APA).**

Academic Honesty Policy-2015

Each enrolled student in this course agrees to abide by the following Academic Honesty Policy-2015:

Texas A&M University-Commerce
Department of Engineering & Technology
Academic Honesty Policy-2015

Statement of Ethical and Professional Conduct:

Students enrolled in this course are expected to follow the highest level of ethical and professional behavior at all times. Each student will be expected to maintain legal, ethical and moral principles, practice professionalism and civility throughout this course of study.

Actionable Conduct:

The following actions on the part of the student will bring sanction against that student:

- **Dishonest Conduct:** Seeking to obtain unfair advantage by stealing, purchasing or receiving unauthorized copies of course related assignments, projects, and/or examinations.
    - o   Intentionally preventing others from completing their course related work.
    - o   The falsifying of records in order to gain admission or to complete an academic program of study.
    - o   The purchase of course related work from any outside or external source.
- **Cheating:** The unauthorized use or copying of another's work and reporting or representing it as your own.
- **Plagiarism:** Using or copying someone else's words, ideas and/or work without citations and the giving of proper credit (reference).
- **Collusion:** Acting with others to perpetrate any of the above actions regardless of your personal gain.

Sanctions:

Faculty, guided by a clearly delineated policy in the course syllabus, will be the arbiter for all in-class violations. All violations will be reported to the Department Head of Engineering & Technology to assure equity and to provide appropriate counsel. In addition, the Department Head will maintain departmental records of violations by students. Sanctions beyond those imposed on the student by the course faculty member will be at the discretion of the Department Head and College Dean. Administrators, faculty and students are guided by the course syllabus, current undergraduate and/or graduate catalogs of the University, University Rules & Procedures, and
The Student's Guidebook.

Students will always be afforded due process and review as appropriate under University policy.

As an official university student enrolled in this academic course, you will be held accountable for your actions in this course. This *Academic Honesty Policy* is in effect for the duration of this course of study and all enrolled students are expected to abide by the stated policy.

1.   If you **cannot accept** this *Academic Honesty Policy* you must notify your Professor immediately by email or in-person and **also officially withdraw from this course of study**.

2.   If you choose to remain in this course you are hereby accepting and agreeing to abide by this *Academic Honesty Policy*. **No further action on your part is required.**

Dr. Jerry D. Parish, Professor of Technology Management-2015

Please print and read this document before continuing in this course of study.

TMGT 510 01W-Management of Technology in Organizations-Fall Semester-2015

General Overview of This Course of Study

As you are aware, this is a graduate level course. This fact alone dictates a different learning environment than you may have experienced in your past education and will require, in some cases, a new approach to the learning process on your part. A graduate degree has value in its ability to expand and enhance the depth and breadth of your current career, future career goals and your overall ability to become a more aware thinker, decision maker, resource manager, project manager and communicator. You will be expected to develop your reading, research and writing skills to a level that you may never have experienced previously. This will required: dedication to this course and a desire to advance your education and the art of learning that may be new to you. Additionally, your time management skills will be put to the test as you try and balance other courses, career, family, leisure time and other obligations along with your responsibilities to this course.

The educational philosophy of this course is as follows:

The student is the center of the learning process; therefore, the student is expected to assume the responsibility for their learning - to the degree and level that learning is achieved. The Professor will serve as the guide and facilitator for the student learning experience. The student is expected to approach learning with purpose, commitment, dedication, seriousness and an attitude of exploration. The student is expected to read carefully all materials provided by the Professor, complete all course assignments in accordance with the instructions and specifications provided by the Professor comply with assignment deadlines and work within the assignment/course evaluation criteria.

As the student you are to be an *active learner*, be fully engaged in all facets of the course and its content. You will be expected to proof and assess the quality of your work **before** it has been presented to your Professor. It is critical to your success for you to comply with the writing and formatting guides associated with this course of study and for you to have a high level of understanding of these documents. Before you turn any work into the Professor, it is your responsibility to compare your written material with the requirements/specifications of the writing and formatting guides provided for this course of study and to ensure to the Professor that you have fully complied with all requirements of the assignment, project examination and/or course.

Communications with Your Professor

- Correspondence with your professor in this course will be done via email.
- All emails to your professor <u>must</u> be written in a **formal business format**, with a salutation, body, and closing.
- Emails must be written in complete sentences, correctly spelled words, correct punctuation, grammar, etc.
- All emails sent to your Professor **<u>MUST</u>** have the following in the email **SUBJECT LINE**:

  TMGT 510 01W - J. Parish: *Your First Name, Your Last Name, Your CWID #*

- **Virtual Office Hours**: My online office hours are noted on page 1 of this syllabus.
- If you have course related questions or concerns, you may email me and I will respond.

Course Operational Policies

This graduate course will require you to read, conduct extensive research and write at a level appropriate for a university master's level student. It is assumed that you can read and write at this level coming into the course.

- You will be expected to read and comprehend the course syllabus, course emails and course announcements.
- You will be expected to manage your time effectively and efficiently throughout the semester.
- You will be expected to meet all deadlines and due dates.
- You will be expected to participate fully in the course by checking announcements, emails and responding to emails when appropriate.
- You will be expected to practice **civility** and a *__formal business writing style and format__* in all of your written correspondence (*including emails*) and in your verbal interactions with the professor, staff and students.
- You will be expected to devote **at least 16 clock hours** to this course each week of the semester (including on-line and off-line).
- **NOTICE: If you are not willing to devote the time and effort necessary for the successful completion of this graduate level course or if you do not have the prerequisite knowledge/skills to successfully complete this course, then you need to discuss this matter with your academic advisor immediately.**
- You will be expected to log into **eCollege** often and to check for correspondent from your Professor daily.
- Work, vacation, travel, sickness/accident/death outside your immediate family does **NOT** constitute an approved excuse for not completing assignments, projects, examinations and/or not meeting course deadlines and due dates.

No extra credit, additional work to improve a grade or the re-doing of an assignment, project or examination will be permitted in this course.

If you find it necessary to miss a deadline/due date and you believe you have a valid reason that meets university guidelines and that meets the course policy, notify me immediately in writing!
I will work with you to find a solution for your situation, if possible.

Civility is the rule at all times!

University/College/Department Surveys: Your feedback may be requested by Texas A&M University-Commerce during the semester/term regarding your course. *It is important that you take a serious and constructive approach to this activity.* The information gained from you will assist in course evaluation by the university/college/department to insure that effective learning is taking place within the existing course structure. If changes are indicated, this will help with course re-design and/or other revisions that will make the course more relevant for future students and the employers of graduates.

Avoid Plagiarism

United States law recognizes that words and ideas can be stolen. The expression of original ideas is considered intellectual property, and is protected by copyright laws, just like other inventions. Almost all forms of expression fall under copyright protection as long as they are recorded in some way *(such as a book or computer file).*

All of the following are considered plagiarism:
- Turning in someone else's work as your own.
- Copying words and/or ideas from someone else without giving proper credit.
- Failing to put a quotation in quotation marks.
- Providing incorrect information about the source of a quotation or information source.
- Changing words, but copying the sentence structure of a source without giving proper credit.
- Copying so many words or ideals from a source that it makes up the majority of the work you have written, whether you give credit or not.

To avoid plagiarism, an individual must give credit whenever they:
  a) use another individual's idea, opinion, or theory;
  b) use facts, statistics, graphs, and drawings that are not common knowledge;
  c) use quotations of another individual's spoken or written words; or
  d) paraphrase another individual's spoken or written words.

Any works referenced should be properly cited in accordance with the **APA 6th edition Publication Manual.**
Turnitin, or other similar plagiarism verification services, may be utilized to verify the absence of or presence of plagiarism in any or all student assignments/work submitted for the comprehensive examination or other coursework.

Also, be aware that the statute of limitations for penalties for plagiarism does not expire upon the completion of the course or even upon graduation. If an instance of plagiarism is found any time after the completion of the course, the course grade is subject to change accordingly and any awarded degree utilizing the course is subject to revocation.

In most cases plagiarism can be avoided by citing your sources correctly. Simply acknowledging that certain material has been borrowed, and providing your audience with the necessary information to locate that source, is usually enough to avoid a plagiarism charge.

Plagiarized assignments, projects and examinations may result in a grade of F on the assignment and the course.

Course Official Gradebook

Your Professor maintains the official grade book and calculates grades externally from the courseware. The eCollege grade book is NOT the official grade book and is utilized only for the purpose of retrieving assignment, project and examination grades, when applicable, and as a convenient feedback utility to inform students of individual assignment grades, once available. The eCollege grade book may or may not display all credit assignments at any given time during the semester and therefore is NOT to be used as a planning tool for identifying required activities or due dates. Grade totals and percentages in the eCollege grade book may not reflect actual course performance.

Final Examination for the Master's Degree
Refer to Texas A&M University-Commerce Procedure 11.04.99.R0.20.

All Master of Science Degree in Technology Management candidates must satisfactorily pass a comprehensive examination covering course work within their master's degree program of study. For candidates pursuing the Master of Science Degree in Technology Management the comprehensive examination will be online and be administrated as a component of the TMGT 599 course.   Evaluation of the comprehensive examination will be conducted by an *advisory committee* in the Department of Engineering & Technology and the final student grade will be recorded as **PASS** or **FAIL**. A candidate who fails the comprehensive examination must complete whatever further courses or additional study that are stipulated by the *advisory committee*. This additional work must be satisfactorily completed and the comprehensive examination must be taken again and passed before the student will be eligible for graduation. If failed, the comprehensive examination may **NOT** be retaken during the same semester or term.

Course Writing and Formatting Guidelines

The following documents will provide general guidelines for all required writing and formatting in this course of study. You should familiarize yourself fully with the content of these documents in order to insure your compliance with course requirements. It is expected that you will fully comply with these guidelines in completing all of your coursework. Points will be deducted for non-compliance. It is also expected that you will refer to the **APA Manual** for formatting and/or writing questions **not** addressed in the following course documents.

GUIDE TO WRITING A LITERATURE REVIEW

Definition: A *literature review* focuses on a specific topic and includes a critical analysis of the various written/published documents of professionals in the field. The *literature review* is **not** an annotated bibliography in which you simply summarize briefly each article/publication you have reviewed. However, the *literature review* is a summary of what you have read and it goes well beyond merely summarizing professional literature. It focuses on a specific topic and includes a critical analysis of the relationship among different works and related research to your work. It provides the reader with a comparison between various sources of state-of-the-art literature and a current view and state of the topic. Additionally, the *literature review* will present what research has been done, and what is known regarding the topic.

IMPORTANT: The publications used for the literature review must be from professional referred journals, referred conference proceedings and/or published academic textbooks. This insures that the authors are professionals in their field and that other professionals have examined and vetted their research/published work.

Sections of the Paper:
- **TITLE PAGE:** Refer to the title page template provided in this course syllabus.
- **ABSTRACT:** The abstract will be on page two (2) and has a *limit of 150 words*, **single-spaced.**
- **INTRODUCTION:** The introduction will begin on page 3 and will have the heading of introduction centered under the paper title (refer to page 12 of this syllabus). An introduction is necessary to introduce your reader to the topic that you are discussing in the paper they are about to read. The introduction provides the reader supporting information about your topic, the significance, the rationale, your objectives or generally what you will be discussing in your paper. The introduction will not contain detailed information; this will be done in the body of the paper. Some would say that the introduction should contain your thesis statement and introduce your reader to your purpose of writing the paper. *The introduction should be ¼ to ¾ of a standard page in length.*

- **BODY of the PAPER:** This part of the paper should contain your detailed research findings and information you gained from your research and readings that relate directly to the topic of the class assignment. *Layout this part of the paper in sections, with headings/sub-headings that organize your presented research findings, and that will assist the reader in their understanding of your methodology and discussion.* You are to state, discuss, support and document your research findings in this section of the paper.

- **CONCLUSION:** In this section you summarize your findings and tie back to your introduction statement. In the conclusion, the reader should be able to (*if they only read the conclusion*) gain 70-80% of the data and/or main points presented in your paper in a summary format.

- *The conclusion is the most important part of the paper and you must treat it as such, so spend time developing and organizing an outstanding, concise and well written conclusion.* The conclusion should be at least one-page in length, with two standard text pages the maximum length.

- **REFERENCES:** The reference page(s) will follow the papers conclusion section beginning on a new page.

Refer to the *Publication Manual of the American Psychological Association, 6th edition* for style, format and organization of elements **not** addressed in this syllabus.

General Writing and Formatting Guidelines for Your Paper
(Reference APA Manual, section 8.03 and sample papers, Chapter 2)

- Paper size: Papers shall be typewritten on 8.5" x 11" paper, one side only.

- Line Spacing: Double-space between all text lines of the manuscript, does not include the abstract.

- Margins: One inch margins on all sides (top, bottom, left, right).

- Font type and size: Times New Roman, 12 point.

- Paragraph indention: Indent the first line of every paragraph 5-7 spaces (1/2 inch), with the exception of the Abstract and reference list entries.

- Alignment: Align text left (uneven right edges), not justified (even left and right edges).

- Spacing after punctuation: Use 1 space after commas, colons, and semicolons within sentences and 2 spaces after punctuation marks at the end of sentences.

- Pagination: Number all pages consecutively, beginning with number Page1 of ? on the title page. Page numbers shall be flush-right on the first line of every page (use the header function found in WORD) one inch from the right edge of the paper.

- Running head: **In this course of study,** the running head on each page *(other than the title page)* is to consist of the following information:

    In this order: your last, your CWID number, and the assignment number.

The running head shall be flush left in all uppercase letters using 12 point font and on the same line as the page numbers. **Do not bold the running head.**

- Heading levels: Follow guidelines in the APA Manual, section 3.03.

Title Page
(Reference APA Manual, section 2.01-2.02, 8.03, and sample papers, Chapter 2)

- The **paper title** is to be centered **<u>10 single spaces</u>** down from the top line of page one (1).

- Use 12-point font for the title page.

- **<u>No running head on the title page.</u>**

- **<u>Follow the template provided in this course syllabus for your title page (page 11).</u>**

- <u>Title:</u> The title shall be centered on the title page and shall be typed in **bold** uppercase and lowercase letters.

- <u>Author:</u> The author's name shall be double-spaced and centered beneath the title.

- <u>CWID:</u> The author's college-wide ID number shall be double-spaced and centered beneath the author's name.

- <u>Assignment:</u> The assignment number shall be double-spaced and centered beneath the ID number

- <u>Course Number & Name:</u> The course number, including section number, and name shall be double-spaced and centered beneath the assignment number.

- <u>Professor's Name/Title:</u> As illustrated on the template provided.

- <u>Date:</u> Date of your submission.

Paper Title **(Shall be 10 single spaces down from the first line of the page)**

Your Full Name

Your College-wide ID number

Assignment Number (e.g. Assignment #1)

Course number, section & title (e.g. TMGT 510 01W Management of Technology in Organizations)

Presented to:

Dr. Jerry D. Parish, Professor of Technology Management

Date (e.g. August 31, 2015)

Abstract
(Reference APA Manual, section 2.04, 8.03, and sample papers, chapter 2)

- Pagination: The abstract shall begin on a new page (page 2).

- Heading: The label "Abstract" shall be typed using uppercase and lowercase letters. The heading shall be centered on the page on the first line (Do not bold). Double-space between the heading and the text.

- Length: The abstract is a brief summary (maximum of **150 words**) of the contents of the assignment/manuscript. Refer to APA 2.04.

- Format: The abstract shall be typed as a single paragraph with **no** indention, aligned flush-left. Do not italicize.

- Line Spacing: The abstract must be **single-spaced** for this course.

    Note: Keywords, **as shown in the APA Manual sample paper,** *are not to be included in this paper.*

Manuscript Body
(Reference APA Manual, section 2.05-2.08, 8.03, and sample papers, chapter 2)

- Pagination: The body of the paper shall begin on a new page (page 3).

- Subsections of the manuscript body do not begin on a new page.

- Title: The paper title shall be centered on the first line of page 3. The paper title shall be **boldfaced** and is typed in uppercase and lowercase letters.

- Introduction: The first section of your paper's body is to be an introduction. The heading **Introduction** is to be centered and **double-spaced beneath** the paper title on page 3.

- Headings: The remaining sections and subsections of the paper shall all be titled appropriately using headings and sub-heading that will benefit the reader. **Refer to 3.03 Levels of Heading in the APA Manual.**

- The body of your paper must include an identifiable *introduction* and *conclusion* sections with headings.

Tables and Figures
(Reference APA Manual, chapter 5)

Note: Do not cut and paste any table, figure, chart, etc. unless it is of very print high quality. If it appears that you did cut and paste, points will be deducted. All tables, figures, charts, etc. must have proper citations per the APA Manual.

- Format: The format for tables and figures is provided in the APA Manual, chapter 5.

- Each figure, table, chart, etc. must have a citation of its source.

- Table Number & Title: Tables are numbered sequentially as they are presented in the text, beginning with Table 1. The table title is double-spaced beneath the table title. The table title is typed in upper and lowercase letters. The table number and title appear above the table, as shown below.

    Table 1

    Summary of the Data Collected during Experiment 1

Table Data

<u>Figure Number & Title:</u> Figures are numbered sequentially as they are presented in the text, beginning with Figure 1. The figure title, or caption, provides an explanation of the figure. The figure number and caption appear beneath the figure, as shown below.
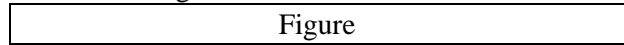
Figure

Figure 1. Software development flow chart

Citations
(Reference APA Manual, chapter 6)

- <u>Format:</u> All references used in the paper must be cited in the text using the APA author-date system. All references cited must be included in the reference list. Likewise, each entry in the reference list must be cited in the text. The guidelines for citations are provided in the APA Manual, chapter 6. Two basic examples of the author-date citation system are shown below.

    Kinsler (2009) stated that individuals are more likely to select engineering as a profession if they took higher level mathematics courses in high school.

    Students who took higher level mathematics courses in high school are more likely to select engineering as a profession (Kinsler, 2009).

References
(Reference APA Manual, section 2.11, 8.03, sample papers, chapter 2, and chapters 6-7)

- <u>Pagination:</u> The reference list shall be on a new page following the conclusion section of the manuscript body.

- <u>Heading:</u> The label "References" shall be typed using uppercase and lowercase letters. It shall be centered on the page on the first line. Do <u>not</u> bold.

- <u>Indention:</u> Reference entries shall use a hanging indent format. The first line of the reference is flush-left and all subsequent lines are indented 5-7 spaces (1/2 inch).

- <u>Format:</u> The references shall be arranged in alphabetical order following APA format outlined in the APA Manual, chapters 6 & 7. An example of a journal article reference is provided below with explanation.

Author(s): Last name,

Article title: Lowercase letters with the exception of the first letter in the first word, proper nouns, or the first letter following a colon

Light, M. A., & Light, I. H. (2008). The geographic expansion of Mexican immigration in the

United States and its implications for local law enforcement. *Law Enforcement Executive*

Forum Journal, 8(1), 73-82.

Title of publication: Italicized, upper and lowercase letters.

Volume number:

Issue number: Non-italicized

Article page

- <u>Digital Identifier:</u> If a digital identifier is assigned to an article, include "doi:xx.xxxxxxxxxx", following the page numbers.

- <u>URL Address:</u> If an article is retrieved online, include "Retrieved from http://www.xxxxxxxxx" following the page numbers.

Grading & Evaluation Policy

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

Assignments: <mark>**400 Total Possible Points in this course of study.**</mark>

GRADING SCALE

A = 400-360
B = 359-319
C = 318-278
D = 277-237
F = 236-000

COURSE ASSIGNMENTS

All work in this course is to be completed individually, without collaboration from others. Refer to the section in this course syllabus on plagiarism.

*Each student in this course of study agrees to accept and abide by the **Academic Honesty Policy** found in this course syllabus.*

As you read the textbook, outside readings and conduct research, familiarize yourself with the requirements in the following assignments. Also, as you read, take notes of materials/key points that you may wish to include in your written paper. Be sure to maintain the title, author, location, etc. of the sources of your research. After you have read and thoroughly researched your source materials, review the assignment again and begin to organize your thoughts as to the most effective, complete and concise way to organize your paper while keeping the reader in mind. Write a draft first, then read, **think** and make necessary revisions. Repeat this process as many times as you need in order to produce **your best** work. Be careful of formatting, word usage, spelling, grammar and be sure to cite all of your sources, if applicable. Additionally, I will be looking for evidence in your paper that you read the textbook, conducted appropriate and extensive outside readings and that you understood and were able to analysis the information you read for the benefit of the reader. Write to your intended audience and at a level they can understand.

REQUIRED COURSE ASSIGNMENTS

WORKING DEFINITION:

Definitions of Technology Management and/or Management of Technology

- **National Research Council**: Management of Technology links engineering, science and management disciplines to plan, develop and implement technological capabilities to shape and accomplish the strategic and operational goals of an organization.
- **Wikipedia**: Technology Management is a set of management disciplines that allow organizations to manage their technology fundamentals to create competitive advantage. Typical concepts used in technology management are: technology strategy, technology forecasting, technology roadmap, technology project portfolio and technology portfolio. The role of the technology management function in an organization is to understand the value of certain technology for the organization. Continuous development of technology is valuable as long as there is a value for the customer and therefore the technology management function in an organization should be able to argue when to invest on technology development and when to withdraw. Technology Management can also be defined as the integrated planning, design, optimization, operation and control of technology products, processes and services, a better definition would be the management of the use of technology for human advantage.
- **Association of Technology, Management, and Applied Engineering (ATMAE)**: Technology Management is the field concerned with the supervision of personnel across the technical spectrum and a wide variety of complex technological systems. Technology management programs typically include instruction in production and operations management, project management, computer applications, quality control, safety and health issues, statistics, and general management principles.

INTRODUCTION TO ASSIGNMENTS:

The fundamental components and theories comprising the field of technology management have evolved over the years to include a wide spectrum of technical management practices, empirical data, professional literature and knowledge. There are many proven models and methods that

enable the manager to effectively manage the development and utilization of current and evolving technologies.

The study of technology management has application for project managers, lead engineers, section/department managers, production managers, company executives, as well as many others. Those employed in the following type enterprises may benefit from this study:

Types of Organizations That Encompass the Technology Management and Management of Technology Spectrum

- Banking
- Construction
- Manufacturing & Operations
- Information Technology
- Automotive
- Healthcare/Medical
- Engineering
- Energy & Geology
- Research
- Aerospace & Defense
- Design
- Architectural
- Transportation
- Communications

Key Components of the Technology Managers' Toolbox

Based on research findings, the following key components should make-up the primary knowledge base of the contemporary technology manager:

- Critical Thinking
- Project/Product Management, Evaluation, Selection and Development
- Leadership Skills Required in Technology-Intensive Organizations
- Application Based Research and Data Interpretation
- Innovation, Creativity and Change Management
- Organization Design for Technology-Intensive Organizations
- Motivation and Evaluation of Technical Professionals
- Team Building, Selection and Management
- Decision Making Models in Technology-Intensive Organizations
- Leadership in the Global and Diverse Enterprise/Marketplace
- Communication Internal and External to the Organization
- Work Control Tools and Techniques
- Measuring Project Performance

- Managing and Utilizing Information and Knowledge
- Risk Management

Academic studies in technology management may include all or several of the following areas: entrepreneurship and new ventures, science and technology policy, innovation, creativity and change, economics, statistics, accounting, organizations and organizational behavior, finance, decision and simulation methods, legal issues, information systems, marketing of technical products, production and manufacturing, product management, project management, business strategy, human resources, communications, reliability and maintainability, safety, human factors and international business applications.

This course of study includes two extensive research and writing assignments that explore an array of areas that encompass technology management. Each student is to design, organize, research and provide their unique written response to the first two assignments posed. The third assignment will be an individual comprehensive written open-book research based examination. Student will have several weeks to complete this examination.

Turning-In Assignments

- Assignments are to be turned in to your Professor as an *"attachment to an email"*.

- The **subject line** of your email **must** contain the following information (in this order):

    TMGT 510 01W– J. Parish: *Your first Name, Your last name, Your CWID #*

- This course does **NOT** use the eCollege drop box.

- Do **NOT** turn-in your assignments prior to 24 hours before it is due.

- *Submit your assignments only once, the first one submitted will be the one graded.*

Assignment #1-Value 100 points.   *Due by 11:59pm on October 13, 2015*

INSTRUCTIONS:

- Based on your reading of the textbook material, outside readings, and an extensive literature search, **author an original <u>literature review paper</u>** with the title:

> **Common Principles and Practices Used to Successfully**
> **Manage the 21st Century Technology-Intensive Organization**

- **<u>Hint:</u>** Research and compare **traditional business management principles and practices** with those found in today's **technology-intensive organizations**. Be sure you can support your reported findings with valid sources/citations.
  - *To support your narrative, you may want to consider creating a matrix that will illustrate/compare your research findings.*
- Your manuscript is to have a title page, abstract, introduction, body with a well-developed conclusion and reference page.
- Your total manuscript is to be between **2000** and **2500** words including the title page, abstract, introduction, body, and reference page (s).
- Your manuscript is to have a **minimum** of **six (6)** cited references obtained from articles found in refereed journals, articles from edited magazines published by professional organizations or societies, articles from refereed proceedings of professional conferences and/or published textbooks.
- *NOTE: No article published on the **Internet** that is not directly connected to an established peer-reviewed professional conference, journal or magazine is acceptable as a cited reference source. Published textbooks are also acceptable. The course textbook may be used as one reference source.*
- Always keep in mind the intended reader(s) of your literature review when developing and writing your paper. The reader must receive value from your research and what you write.
- You may utilize a matrix, graphs, charts, tables or figures if it enhances the point (s) you are making. ***Do not cut and paste these items in your paper unless they are camera ready proofs/copies!*** If these items are of poor quality you will need to re-create them. Points will be deducted if these items are of poor quality.

Assignment #2-Value 100 points.   *Due by 11:59pm on November 24, 2015*

INSTRUCTIONS:

- Based on your reading of the textbook material, outside readings, and an extensive literature search, **author an original <u>literature review paper</u>** with the title:

> **Project Management Processes Common to Contemporary Technology-Intensive Organizations**

- Your paper **must** identify, incorporate and discuss each of the following *key aspects of project management*:

    (1) Common processes utilized for project selection and evaluation,
    (2) How project selection is accomplished,
    (3) Common project planning fundamentals,
    (4) How to utilize project cost control in project selection and evaluation and
    (5) The scheduling of a project utilizing the critical path method (CPM).

Your work should present information and data that is common to contemporary technology-intensive organizations globally.

- Your manuscript is to have a title page, abstract, introduction, body with a well-developed conclusion and reference page.
- Your total manuscript is to be between **2000** and **2500** words including the title page, abstract, introduction, body, and reference page (s).
- Your manuscript is to have a **minimum** of **six(6)** cited references obtained from articles found in refereed journals, articles from edited magazines published by professional organizations or societies, articles from refereed proceedings of professional conferences and/or published textbooks.
- *NOTE: No article published on the **Internet** that is not directly connected to an established peer-reviewed professional conference, journal or magazine is acceptable as a cited reference source. Published textbooks are also acceptable. The course textbook may be used as one reference source.*
- Always keep in mind the intended reader(s) of your literature review when developing and writing your paper. The reader must receive value from your research and what you write.
- You may utilize a matrix, graphs, charts, tables or figures if it enhances the point (s) you are making. ***Do not cut and paste these items in your paper unless they are camera ready proofs/copies!*** If these items are of poor quality you will need to re-create them. Points will be deducted if these items are of poor quality.

Assignment #3-Value 200 points. *Due by 11:59pm on December 8, 2015*

FINAL EXAMINATION:

- The **Final Examination** for this course will be an <u>individual </u>open-book research based examination completed over a limited and defined period of time.

- **The Final Examination will be sent to each student via email on or about October 28, 2015 and will be due on December 8, 2015.**

- The examination will be based on the content of the course textbook and will also require that you conduct extensive additional outside readings and research in order to successfully formulate your complete responses to the examination questions posed.

- Source citations and a complete listing of references used will be required for each response.

- The **APA Publication Manual** must be followed for all writing.

Texas A&M University-Commerce

College of Science & Engineering

Department of Engineering & Technology

ASSIGNMENT GRADING RUBRIC-STUDENT CHECK LIST

Applies to all classes taught by Dr. Jerry D. Parish, Professor of Technology Management

MARK	INCORRECT/WEAK AREA IN PAPER	POINT DEDUCTION
1	Title Page Incorrect	5
	Refer to pages 8, 10 and 11 of the course syllabus.	
2	Abstract Incorrect	3
	Refer to pages 8 and 12 of the course syllabus.	
3	Introduction: heading or missing text.	2
	Refer to pages 8 and 12 of the course syllabus.	
4	Manuscript Body *(Refer to pages 9 and 12 of the course syllabus).*	
	a. Unsupported content in paper.	3
	b. Poorly written.	3
	c. Paper poorly organized for the reader.	3
	d. Missing and/or incorrect headings *(Refer to APA 3.03).*	3
	e. Formatting errors *(Refer to APA and Writing Guide in course syllabus).*	3
	f. Incorrect tables and/or figures *(quality and/or missing citations).*	3
	g. Missing and/or incorrect citations in paper *(Refer to page 13 of the course syllabus).*	5
	h. Plagiarism appeared in paper-***This may result in a grade of "F".***	10
5	Conclusion *(Refer to the APA Manual and page 9 of the course syllabus).*	
	a. Content weak, lacks vital information for the reader.	5
6	References/Reference Page *(Refer to the APA Manual and pages 13-14 of the course syllabus).*	
	a. Incorrect page heading.	3
	b. Formatting errors.	3
	c. Missing references/citations.	3
	d. Number of references listed is less than minimum required number.	5
7	Spelling and/or Grammar and/or Punctuation and/or Word use errors in paper.	3
8	Mechanics	
	a. Incorrect margins.	3
	b. Incorrect spacing in paper.	3
	c. Incorrect or missing page numbers *(pagination).*	3
	d. Incorrect font.	3
	e. Incorrect running head.	3
	f. Incorrect word count (Outside limits)	3
9	Level of research and writing effort presented in the paper not up to graduate level standards.	10
10	Did **NOT** follow assignment instructions and/or requirements.	10

- When you receive your assignment grade with marks listed in the comment section of the eCollege grade report, you are to use this grading rubric to identify errors in your work.
- Also, you are expected to conduct this self-evaluation prior to any written concerns and/or questions addressed to your Professor.
- Any concerns and/or questions addressed to your Professor must be articulated well and must provide written detailed information as to your specific concern and/or question. ***It is your responsibility to build your case!***

University/College/Department Policies & Procedures

ADA Statement **-** The *Americans with Disabilities Act* (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library, Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamu-commerce.edu

Student Conduct - All students enrolled at the University shall follow the tenets of common decency, civility and acceptable behavior conducive to a positive learning environment. (Refer to the *Code of Student Conduct from Student Guide Handbook)*

Research Studies/Human Subjects – Refer to the **Texas A&M University-Commerce**
Rules & Procedures 15.00.01.R0.01-Human Subject Protection.

Non-Discrimination Statement -Texas A&M University-Commerce will comply in the classroom and in online courses with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

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CRITICAL NOTICE
Grading policies and requirements identified in this syllabus are <u>non-negotiable</u> and will be followed in this course with all students held to an identical standard. If you do not agree with any requirement herein, believe any of them to be "unfair" or "unreasonable," or believe that less should be expected of you than your classmates to earn a comparable grade; you should IMMEDIATELY DROP this course and re-evaluate your dedication to academic integrity and success!

</div>

Drops & Withdrawals

Drop – Removal of the student from one or more courses while remaining actively enrolled in one or more remaining courses in a given semester. A drop must be initiated by the student, with reason, subject to Professor approval, or it may be initiated by the Professor in the case of excessive absences, at the discretion of the Professor. Drop requests **must** be submitted on or before the drop deadline. A student **may not** be dropped from a single course after the drop deadline is passed. Requests to drop a course are submitted via the student's myLEO account.

Withdraw – Elective removal of the student from **ALL** courses in which (s) he is enrolled in a given semester. A withdrawal request must be initiated by the student submitting the official Withdrawal Form to the **Office of the Registrar** on or before the last day to withdraw. Withdrawals cannot be initiated by the Professor and do not require Professor approval.

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During the open registration period at the beginning of the semester, students may add or drop courses without specific authorization (prerequisite requirements and permission-only courses excepted). Should the student determine it to be necessary to drop the course, or withdraw from the semester, it is the student's sole responsibility to submit the proper request **PRIOR** to the official deadlines to complete either of these actions. Drop/Withdrawal requests may **NOT** be submitted through your Professor and informing your Professor of your intent to take either action does not constitute your official request to do so. Professor approval is required to drop the course after the end of the open-enrollment period and prior to the drop deadline. The student **cannot** be dropped after the drop deadline or withdraw after the withdrawal deadline. (This is university procedure, NOT a Professor decision.) The Professor is **required** to submit the actual grade earned by each student remaining on the official roster after the withdrawal deadline, regardless of the level of grade attainment. The student must contact their academic advisor to determine what effect the drop/withdrawal will have on their academic progress prior to initiating either action.

The student is responsible for confirming official university dates/deadlines and meeting any and all necessary deadlines pertaining to drops & withdrawals.   In the event of a discrepancy between a date provided in the course and a date on the official university calendar, the date on the official university calendar, or revised date officially announced by the registrar or other authorized university official, will take precedence.

Grade of "X" (Incomplete)

 In accordance with the Academic Procedures stated in the TAMUC Catalog, "students, who because of circumstances beyond their control, are unable to attend classes during finals week or the preceding three weeks will, upon approval of their Professor, receive a mark of 'X' (incomplete) in all courses in which they were maintaining passing grades." The mark of "X" is rarely applicable and will only be considered in strict compliance with University Policy upon submission of complete medical or other relevant documentation. Discovery of an impending failure of a course, although personally disappointing, DOES NOT constitute an emergency in academia and does not meet the criteria for the assignment of an incomplete.

Syllabus

This syllabus constitutes the contractual (contract) document between the Professor and students enrolled in the course. A student's continued enrollment in the course following the posting of the official syllabus at the beginning of the semester/term signifies the student's understanding of and complete acceptance of this contract and the procedures, requirements, and evaluation criteria contained herein. Any student not accepting this contract is to immediately drop this course. The syllabus identifies credit-earning activities for which you will be responsible to submit in the course. The occurrence of a need to vary from the original syllabus is rare; however, unforeseen circumstances and logistical issues could arise during the course of a semester that necessitates a minor modification in the originally planned activities or procedures. Changes to a syllabus are not made without sufficient justification and assurance that any changes implemented would not impact the students' ability to complete the course. Any variations that may be determined necessary during the course by the Professor will be appropriately announced to the enrolled students in the courseware along with relevant information pertaining to the modification and an updated version of the syllabus will be provided.

Important Dates for This Course

- August 31, 2015   First Class Day of the Fall Semester
- *October 13, 2015*   *Assignment #1 due*
- *November 24, 2015*   *Assignment #2 due*
- *December 8, 2015*   *Assignment #3 due*
- December 18, 2015   Final Day of the fall 2015 semester

Refer to the University Master Calendar for additional important dates.

Professional Biographical Summary

Dr. Jerry D. Parish, CSTM, is a tenured Full-Professor of *Technology Management* in the Department of Engineering & Technology/*College of Science & Engineering (CoSE).* He received his Doctor of Education (Ed.D.) Degree in College Teaching of Industrial & Technical Education from East Texas State University. He also holds a Master of Education Degree in Industry & Technology and a Bachelor of Science Degree in Industrial Technology. Dr. Parish has taught and performed various levels of administrative duties for more than 39 years in higher education. He has worked with Baker College (Oregon), Southeastern Louisiana University, and Berry College (Georgia) before joining **Texas A&M University-Commerce** in 1994. In addition to his years of teaching experience, he has more than 10 years of industrial work experience with companies such as Hardwicke-Etter and Texas Instruments. While at Texas **A&M University-Commerce** he has held the positions of Department Head for Engineering & Technology, Associate Dean for the College of Business & Technology, Interim Dean for the College of Science, Engineering & Agriculture and Director of the Center for Excellence.

He is a member of the American Society for Engineering Education; Institute of Industrial Engineers; Society of Manufacturing Engineers, The Association of Technology, Management, and Applied Engineering and the Association for the Advancement of Cost Engineering International. His consulting experience has included numerous business, manufacturing and educational institutions throughout the United States. He is a Certified Senior Technology Manager (CSTM) awarded by The Association of Technology, Management, and Applied Engineering (ATMAE).

Current research areas include business/industrial leadership, knowledge management and technology management. He has published in various professional journals including the International Journal of Engineering Research and Innovation, The International Journal of Agile Manufacturing, Journal of Industrial Technology, The Technology Interface Journal, and Journal of Epsilon Pi Tau. He has also made formal presentations at numerous professional conferences.