TMGT 511 Emerging Technologies

COURSE SYLLABUS: Fall 2020

Instructor: Burchan Aydin, Ph.D.

Office Location: AG/IT 213-B (*Engineering and Technology Building 2nd floor*)
Office Hours: Online Monday and Wednesday 1:00 to 4:00 pm upon request

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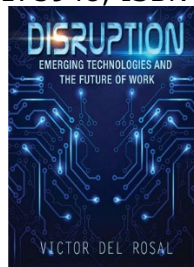**Preferred Form of Communication: e-mail**

COURSE INFORMATION

Course Schedule*:* This course is fully online. Weekly materials are made available on D2L every Tuesday at 8:00 am.
Course Location*:* Online

Materials – Textbooks

Textbook Required

Disruption: Emerging Technologies and the Future of Work, by Victor Del Rosal, 2015, ISBN-10: 1514173948, ISBN-13: 978-1514173947.

This textbook is required for the course.

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Optional textbook: Publication Manual of the American Psychological Association (APA), 7th Edition.

  ✓ **APA format is required** in all assignments and papers in this course. You can find the APA guidelines in this manual.
  ✓ You can also find this manual online from multiple reliable sources**.**

Course Description

Study of emerging technologies and the management, ethical, and societal challenges they pose to engineering and technology organizations. Emphasis on how managers assess emerging technologies, share organizational strategies, make investment decisions, and create organizational structures that can effectively compete in the global market. Extensive research and writing assignments are required. Prerequisites: TMGT 595 (or corequisite), or permission of Department Head..

Student Learning Outcomes

  Upon satisfactory completion of the course, the student shall be able to;
  • Evaluate societal and educational impacts of emerging technologies,
  • Evaluate economic impacts of emerging technologies,
  • Evaluate environmental impacts of emerging technologies,
  • Comprehend the future of work due to the emerging technologies,
  • Preparing for exponential technological change in the future
  • Conduct literature reviews,
  • Support ideas by using peer-reviewed journal articles.

COURSE REQUIREMENTS

This course is completely online.   This course consists of a series of:

  • Homework Assignments,
  • Discussion Post, and
  • Final project.

Point Distribution

Assessment Type	%	Max Points
Assignment 1	10	100
Assignment 2	10	100
Assignment 3	10	100
Assignment 4	15	100
Assignment 5	15	100
Discussion	10	100
Final Project	30	100
Total	**100 %**	

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Based on the points received, the grades will be determined according to the criteria below.

Point	Grade Criteria				
	A	B	C	D	F
Percentages	100 - 90	89 - 80	79 - 70	69 - 60	59 – 0

Brief Explanation of Course Assessments

Assignments:
- The assignments are individual-based.
- Assignments will be made available on D2L, and students shall submit their response to the D2L.
- Name the file as your firstname_lastname_assignment#
- The details of each assignment will be provided with the assignment file, but in general terms, each assignment requires referring to the textbook, and other peer reviewed journal articles to support your ideas, opinions, etc.
- APA 7th edition referencing rules must be used for citations. In-text and after-text references are required.
- The objective of the assignments is to assess students' ability to create a scholarly essay on the impacts of emerging technologies.
- A penalty of 20% PER DAY will be assessed on late assignments. After the grace period of 1 week, ZERO credit towards a final grade.

Discussion:

- Discussion post will be graded based on the following:

Rubric for Discussion posts	
The content of your post: Creativity, originality, clarity, thoroughness	40%
Scientific thought: Support of your ideas by using peer reviewed journal articles	30%
Creative participation in other students' posts (not including sentences such as • I like your idea • That's a good idea • I agree with you Your participation has to be adding value to the post, by showing support with references, or by sharing your own experiences. You are not evaluated by the number of replies you post, but by the **quality** of response.	30%

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Final Project:

- It is an individual project.
- The objective of the final project is to explore an emerging technology and evaluate the societal, ethical, educational, environmental, and economic impacts of the determined technology.
- It is a scholarly essay paper.
- The details are provided on the D2L course page.

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or **point** release of that major version) and the previous major version of iOS (the latest minor or **point** release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

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- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
    - 512 MB of RAM, 1 GB or more preferred
    - Broadband connection required courses are heavily video intensive
    - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

- **For YouSeeU Sync Meeting sessions _8 Mbps_ is required.** Additional system requirements found here: https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

- You must have a:
    - Sound card, which is usually integrated into your desktop or laptop computer
    - Speakers or headphones.
    - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site http://www.java.com/en/download/manual.jsp

- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.
    Pop-ups are allowed.
    JavaScript is enabled.
    Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
    - Adobe Reader https://get.adobe.com/reader/
    - Adobe Flash Player _(version 17 or later)_ https://get.adobe.com/flashplayer/
    - Adobe Shockwave Player   https://get.adobe.com/shockwave/
    - Apple Quick Time   http://www.apple.com/quicktime/download/

- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If

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you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

Brightspace Support

Need Help?

Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.

System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

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Interaction with Instructor Statement

The instructor will response to your questions on D2L tools within 24 hours. For urgent questions, and for questions that are not answered within 24 hours, please prefer e-mail correspondence.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

- Weekly materials are made available every Tuesday at 8:00 am.
- All assignments have to be submitted under the designated dropbox at the D2L website. No e-mail submissions for assignments will be accepted.
- Do not forget to title the documents as: yourfirstname_your lastname_assignment number

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook. http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette http://www.albion.com/netiquette/corerules.html

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01. http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

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Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

ADA Statement

Students with Disabilities

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, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce
Gee Library- Room 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

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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Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

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COURSE OUTLINE / CALENDAR

Week #	Starting Day	Topics	Readings	Assessment(s)
1	Tuesday Aug 25	Introduction to the Course -Exponential Computing Power Growth	Textbook Pages 1-6	-Introduce Yourself **Assignment 1** Due Aug 31st, 11:59 pm
2	Tuesday Sept 1	Emerging Technologies: Enablers of Disruption • Artificial Intelligence • Autonomous Vehicles • Flying Drones	Textbook Pages 7-32	**-Assignment 2** Due Sept 7, 11:59 pm
3	Tuesday Sept 8	Emerging Technologies: Enablers of Disruption • 3D Printing • Internet of Things • Virtual and Augmented Reality	Textbook Pages 33-54	**Assignment 3** Due Sept 14, 11:59 pm
4	Tuesday Sept 15	Emerging Technologies: Enablers of Disruption • Biotechnology • Alternative Energies • Blockchain	Textbook Pages 55-70	**Assignment 4** Due Sept 21, 11:59 pm
5	Tuesday Sept 22	The Future of Work: Shifts Driven By Emerging Technologies • Reality Blurred • Blackbox Combinations • Augmented Humanity • Towards Full Automation	Textbook **PART II** Pages 71-100	**Discussion** Due Sept 28 11:59 pm
6	Tuesday Sept 29	Getting Ready for Disruption: Preparing for Exponential Change • Education for Disruptors • Solving Problems • Engineering Security • The Transition to Prosperity	Textbook **PART III** Pages 101-149	**Assignment 5** Due Oct 5, 11:59 pm
7	Tuesday Oct 6	• Special Topics on Emerging Technology	Other resources	
8	Tuesday Oct 13	Final Project Week		**Final Project Due** Will be announced during the semester

This schedule is tentative. It is subject to change.

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