

LDRS220

Leading With Numbers: A primer for Non-Mathematicians

Dates TBD

Co-requisites or Pre-requisites: None

Semester Hours: 3

Instructor: Rev. Matthew Simonis, MBA, CMBA, C.P.M., CQT, CQI

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Office Hours: Virtual, video calls available via Zoom

Course Description:

This course is a practical study of the leadership application of quantitative reasoning ideas and methods. Emphasis is placed on how leaders use and interpret numbers to make a diverse set of informed decisions.

Instructor Notes:

In any organization, a leader must be able to take steps, through Monitoring and Controlling', to guide the organization toward their mission, vision, and goals. This is accomplished through quantitative data collection and reporting... and carried through analysis into action.

To make these decisions, a leader may not have to fully understand how the data is collected and reported, but they must be able to understand enough to make wise choices for the organization.

In this course we will discuss language and concepts that allow a leader to better understand and communicate financial document information, statistical process control (SPC), and Quality charting. This will allow a leader to better communicate with Accounting, Quality, Procurement, and likely other (functional) departments of an organization.

Learning Outcomes:

Upon successful completion of this course, the student will be able to:

1. Knowledge and Application

- a. Use foundational terms and concepts in accounting/financial management methodologies
- b. Interpret financial documents (typically monthly or annual reports) to aid in organizational decision making
 - i. Including the use of ratios to denote trends and health of an organization
- c. Assemble and use a basic budget, including variance control
- d. Accurately calculate standard deviation, selecting the appropriate formula of 'population' or 'sample'
- e. Convert SPC data into the 'Seven Quality Tools', reporting the data into a usable format for stakeholders to use for decision making

2. Cognitive Complexity

- a. Overcome the challenges of the data collection and reporting to result in 'valuable' data that can guide a leader and shape organizational decision making

3. Social Responsibility and Global Engagement

- a. Use the power of quantitative analysis to guide an organization, regardless of size. But many organizations have impact within their communities; and this can certainly extend to having global impact.
 - i. This can include the reporting of the data in a legally compliant and ethical manner

4. Leadership

- a. Make sound organizational decision based on the results of the quantitative analysis
- b. Decisions can sometimes provoke emotions and holding to properly tabulated quantitative analysis can improve the quality of the decisions

Required Texts and Materials:

Berman K, and Knight, J. (2013). *Financial Intelligence*. Boston: Harvard Business Review Press.

- ISBN: 978-1-4221-4411-4

Roundtree, D. (2004). *Statistics Without Tears: A Primer for Non-Mathematicians*. TWU Package.

- No ISBN

Scientific Calculator (optional)

Microsoft Excel

Weekly Overview:

This course will commonly involve combinations of the following weekly activities: readings, watching web videos, written assignments and FAR Centre activities. Your week will end with a Weekly Recap Status Report that will be submitted directly to the Instructor.

Reading assignments will be defined in Moodle, each Unit is a week in this course. Due to the participation in FAR Centre sessions, all Personal Activity must be completed prior to those weekly sessions.

Weekly written assignments are intended to consider the theory of the weekly topic and apply it in a narrative manner. These are typically in the form of self-analysis or application to a real-world scenario.

- All written assignments are to be uploaded in Moodle at the end of each week.
- The assignments require the use of Microsoft Excel and/or Word, but could use other software, too.
- All written work is to be DOUBLE SPACED and include a title page.
- Written assignments must comply with APA citation formatting. However, due to the nature of the content of this course, in the organizational/corporate world, documents hardly ever contain 'formal' language (i.e. research papers). So, written work for this course is commonly 'narrative' and may include bullet points. Complying with word-count requirements is still in force.
- APA formatting may be easier if managed with your word processor. For example, consider youtube.com offerings for 'managing sources in Microsoft Word'. For example: <https://www.youtube.com/watch?v=r4srwwHGWzg>

TWU Standard Grading System:

Letter Grade	% Range	Grade Point	Grade Description
A+	98-100	4.3	Unusually outstanding work; completely error-free work at the highest level attainable
A	94-97	4.0	Outstanding, excellent work
A-	90-93	3.7	Outstanding, excellent work with very minor flaw/s
B+	87-89	3.3	Very good work with few flaws
B	83-86	3.0	Good, competent work
B-	80-82	2.7	Good, competent work with noticeable flaws in one or more areas of content, syntax, formatting, and/or APA usage
C+	75-79	2.3	Adequate, reasonably satisfactory work with significant flaws in one or more areas
C	70-74	2.0	Adequate, reasonably satisfactory work with significant flaws in two or more areas
C-	65-69	1.7	Adequate, reasonably satisfactory work with significant flaws in three or more areas
D+	60-64	1.3	Minimally acceptable work
D	55-59	1.0	Minimally acceptable work
D-	50-54	.7	Minimally acceptable work
F	Below 50	0	Inadequate Work

Policies:

Academic Integrity and Avoiding Plagiarism at TWU

As Christian scholars pursuing higher education, academic integrity is a core value of the entire TWU community. Students are invited into this scholarly culture and required to abide by the principles of sound academic scholarship at TWU. This includes, but is not limited to, avoiding all forms of plagiarism and cheating in scholarly work. TWU has a strict policy on plagiarism (see academic calendar). Learning what constitutes plagiarism and avoiding it is the student's responsibility. An excellent resource describing plagiarism and how to avoid it has been prepared by TWU Librarian William Badke and is freely available for download (PPT file) or used as flash (self-running) tutorials of varying lengths from:

<http://acts.twu.ca/library/plagiarism.ppt>

<http://acts.twu.ca/library/Plagiarism.swf> (14-minute flash tutorial)

http://acts.twu.ca/library/Plagiarism_Short.swf (8 minute flash tutorial)