

Associated Canadian Theological Schools
of Trinity Western University

MFT 582: Statistics and Research Evaluation

Howard G. Andersen, Ph.D.
Fall 2016
3 credit hours

TA: Rob Matula
Class Dates: Fridays, 09 Sept to 02 Dec
Class time : 10:00am to 1:00 pm

I. Course Description

This course covers basic statistics and research methods in counselling and marriage and family therapy. This includes an overview of basic quantitative and qualitative analytical techniques in clinical research, an exploration of program evaluation and evidence-based practice, and an introduction to ethical issues in research. Emphasis will be placed on how to evaluate and critique published research, rather than how to conduct research.

II. Objectives

Successful completion of the course means the student will have demonstrated:

1. an understanding of investigative and statistical concepts and methods applied to research in social science disciplines
2. an appreciation of ethical considerations in social science research
3. skill in critiquing and assessing research papers in social science research including:
 - a. qualitative research
 - b. quantitative research
 - c. program evaluation

III. Course Textbooks

Required:

Beaudry, J.S. and Miller, L., Research Literacy, Guildford Press, New York, 2016.

Supplemental reading will be posted on mycourses or handed out in class or be found online from time to time.

Required software and connectivity:

Access to all TWU facilitated materials and functions.

IV. Course Assignments

General requirements for written work in this course.

Format should be 12 point type, double spaced with title page and references. Page counts are maximums and do not include title page and references. Penalties will be applied for going over the page count. Use APA formatting. Consult the APA guide for this.

Strive for great compositional quality, clarity, and compactness. Do not use throw away words. Writing should not be conversational. Most of your writing should be evaluative and critical in nature, not descriptive.

All your written work should be submitted electronically to the course website.

Note that each due date for submission of written work is a Friday at 11:45 p.m.

A. Demonstrate serious engagement with all issues in the course through class participation.

Each meeting of the class will feature specific requirements and opportunity for engagement. 15%

B. Demonstrate awareness and appreciation of ethical issues in research.

4 pp Due 23 Sept 10%

Write a report showing you have an appreciation for ethical issues in research by exploring the TWU website materials produced by the Research Ethics Board (REB), including important links therein to other sites.

C. Demonstrate skill in critiquing and assessing Qualitative Research

6 pp Due 7 Oct 20%

Read, and, using the understanding developed in this class, critically evaluate this article in detail, including all elements of the research, and the quality of the presentation itself. Also provide a summative statement of your assessment of the research.

Article #1: Bachelor, Alexandra. Clients' Perception of the Therapeutic Alliance: A qualitative Analysis. *Journal of Counselling Psychology*. Vol. 42, No. 3, pp. 323-337. 1995.

D. Demonstrate skill in critiquing and assessing a Program Evaluation

6pp Due 21 Oct 20%

Read, and, using the understanding developed in this class, critically evaluate this article in detail, including all elements of the research, and the quality of the presentation itself. Also provide a summative statement of your assessment of the research.

Article #3: Rebecca N. Warburton, et.al. Identification of seniors at risk: process evaluation of a screening and referral program for patients... *International Journal of Health Care Quality Assurance*. Vol 17. No.6. 2004. Pp. 339-348.

E. Demonstrate skill in critiquing and assessing Quantitative Research

6 pp Due 25 Nov 20%

Read, and, using the understanding developed in this class, critically evaluate this article in detail, including all elements of the research, and the quality of the presentation itself. Also provide a summative statement of your assessment of the research.

Article #2: Borys, Debra S. and Pope, Kenneth S. Dual Relationships between Therapist & Client: A National Study of Psychologists, Psychiatrists, and Social Workers. Professional Psychology: Research and Practice. Vol 20, Issue 5, Oct 1989, pp. 283-293.

F. Demonstrate understanding of investigative methods and concepts.

6 pp Due 09 Dec 15%

Write a careful, comprehensive, critical review of the Research Literacy textbook. If you are unfamiliar with how to write a review at the graduate level, see the Queens University Library website for guidance. You may also consult the U of Alberta Library Website. Pay special attention to the fact that this is a critical review, not just a report or description of content.

Grading Scale

Letter Grade	Percentage	Grade Point
A+	97-100	4.30
A	93-96	4.00
A-	90-92	3.70
B+	87-89	3.30
B	83-86	3.00
B-	80-82	2.70
C+	77-79	2.30
C	73-76	2.00
C-	70-72	1.70
F	Below 70	0.00

VI. Course Outline, Reading Schedule, and approximate Class Schedule

Note: Each meeting of the class will feature:

1. discussion and analysis of particular statistical issues and methods,
2. discussion and analysis of published research papers.

The list and scheduling of topics below may change from time to time depending on the needs surfaced in class discussion. Research articles to be read and discussed will be announced, should be read ahead of time, and are found on mycourses. RL chapters are to be read ahead of the indicated date. There will also be additional readings from time to time.

Sept 09 General introduction. Course introduction. General issues regarding research and statistics.

RL chs 1,2

16 Topics: Worldview issues; Christian critique of Social Science Research. Qualitative Research.

RL chs 3,4,5

23 RL chs 6,7 SPSS demo plus APA style (Rob Matula)

30 Topics: Experimental research: important concepts and ideas

RL chs 8

Oct 07 Program evaluation. Guest lecturer.

RL chs 14,15

	14	Factorial analysis. Factors, levels, effects. Repeated measures.
		RL ch 9,10
	21	Non experimental research.
		RL ch 11
Oct	28	ACTS Reading Week. No class.
Nov	04	Correlation and regression studies.
		RL ch 12
	11	Remembrance Day – no class
	18	More on regression. Determining appropriate statistical tests.
		RL ch 12
	25	Mixed methods
		RL ch 13
Dec	02	Special Topics. Structural equation modelling, big data, data analytics. Guest lecturer.
Dec	09	Wrap up

Supplement: Important Academic Notes

Web Support – Student Portal <https://students.twu.ca>

All students at TWU have a TWUPass username and password. This is determined at the time of an online application or can be managed through the computing services help desk or the link on the student portal. Your student email account is also available through this student portal and is vital for communication about grades, account statements, lost passwords, sign-up instructions, etc. If you do not know your account or password, there is a link at the login area called “I forgot my password.” When you click on that link, you will be walked through the

process of retrieving your account information.

Campus Closure

In the event of deteriorating weather conditions overnight or other emergency situations, every effort will be made to communicate information regarding the cancellation of classes to the radio stations CKNW (980 AM), CKWX (1130 AM), MAX (850 AM), PRAISE (106.5 FM) and KARI (550 AM) by 6:30 a.m., and an announcement will be placed on the University's switchboard as well as on the website <http://www.twu.ca/conditions/>. The first announcement regarding a closure will cover the period up to 1:00 p.m. only. If classes are to be cancelled beyond 1:00 p.m., this decision will be announced by the same means before 11:00 a.m. that day. Students and faculty should assume that all night classes will continue to operate. If the emergency continues into the evening, students and faculty may check for a closure notice on the University's switchboard and website after 3:00 p.m. that day.

Paper Formatting

Students need to adhere to Turabian Notes (Bibliography) format except in counselling courses, for which APA format is used.

Students are strongly encouraged to use RefWorks (available through the library home page www.twu.ca/library) as their bibliographical manager and as a tool for formatting bibliographies. They will need to be aware of the need to “clean up” most bibliographies generated by this program. Students are encouraged to view the documents on the following websites for format samples: http://www.press.uchicago.edu/books/turabian/turabian_citationguide.html or www.dianahacker.com/resdoc/. Note that in RefWorks the available formatting styles are those of Turabian (Notes), 7th edition, and APA – American Psychological Association, 5th edition. For Turabian, note that there are two formats – Notes (or Bibliography Style) and Reference List (a short format citation style). ACTS uses the Notes (Bibliography) format, not Reference List.

Counselling students are expected to purchase the APA Publications Manual. More information found at the following website. <http://www.apastyle.org/pubmanual.html>.

For free online programs that will enable you to create properly formatted bibliography citations, go to <http://www.calvin.edu/library/knightcite/> ("Chicago stands for "Turabian") or <http://www.sourceaid.com/citationbuilder/>

CANIL students can locate this on the CANIL intranet, under the “student” side. A hard copy is given to incoming students in the fall.

Please check with your professor to see which one he/she recommends you use!!

Research Ethics

Please note that all research projects involving human participants undertaken by members of the TWU university community (including projects done by ACTS students to satisfy course or

degree requirements) **MUST** be approved by the Trinity Western University Research Ethics Board. Information and forms may be found at <http://www.twu.ca/academics/research/ethics/> Those needing additional clarification may contact Dr. Bruce Guenther. Please allow at least three (3) weeks from the date of submission for a review of the application.

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 2008-09, pp. 37-38). Further details on this subject are contained in the ACTS Student Handbook in section 4.12. The handbook is available online on the ACTS webpage (www.acts.twu.ca) at the following link: www.acts.twu.ca/Handbook.html.

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://www.acts.twu.ca/lbr/plagiarism.ppt>

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

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

Equity of Access

It is the responsibility of a student with a learning disability to inform the ACTS Director of Student Life of that fact before the beginning of a course so that necessary arrangements may be made to facilitate the student's learning experience. We are unable to accommodate any student who informs the Director of Student Life of a disability after the beginning of class.