

COURSE OUTLINE					
TERM: Spring 2021	COURSE NO: MT 462				
INSTRUCTOR:	COURSE TITLE: Principles of Research				
OFFICE: LOCAL: E-MAIL:	SECTION NO(S):	<b>CREDITS:</b> 3.0			
OFFICE HOURS:					
COURSE WEBSITE:					

Capilano University acknowledges with respect the Lil'wat, Musqueam, Squamish, Sechelt, and Tsleil-Waututh people on whose unceded territories our campuses are located.

#### **COURSE FORMAT**

Three hours of class time, plus an additional one-hour lab, for a 15-week semester, which includes two weeks for final exams.

#### **COURSE PREREQUISITES**

PSYC 101

#### **CALENDAR DESCRIPTION**

Students in this course will learn a variety of quantitative and qualitative methods of research and of analysis, and to understand the limits of interpretations based on such research and analysis. Students will be able to use and understand both qualitative and quantitative research methods, statistical analysis, and qualitative analysis, be able to conduct, analyze and present basic research, and use critical thinking in assessing the effectiveness and limitations of research.

#### **COURSE NOTE**

MT 462 is an approved Quantitative/Analytical course for baccalaureate degrees. MT 462 is an approved Numeracy course for the Cap Core requirements.

## **REQUIRED TEXT AND/OR RESOURCES**

#### **Required Readings**

Cozby, P. C., & Rawn, C. D. (2016). *Methods in behavioural research* (2<sup>nd</sup> Canadian ed.). Toronto, ON: McGraw-Hill Ryerson.

There will be additional in-class readings, consisting of Music Therapy studies using the various research designs covered in the course. This reading list will be posted to the class eLearn page. Other required readings are indicated on the course schedule content schedule below.

#### **Recommended Readings**

Creswell, J.W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson. Chapters 2-4.

Wheeler, B. (Ed.). (2005). *Music therapy research* (2<sup>nd</sup> ed.). Gilsum, NH: Barcelona Publications.

# **COURSE STUDENT LEARNING OUTCOMES**

# On successful completion of this course, students will be able to do the following:

- Instructional:
  - 1. Apply (in exams, written assignments and original research) knowledge and understanding of current quantitative and qualitative research methods and statistics; concepts from the philosophy of science and the nature of scientific reasoning; an understanding of sampling and sampling error and of descriptive and inferential statistics; the appropriate use of the various research methods and statistics and the limitations of each method; and how statistics can be misunderstood or used incorrectly;
  - 2. Integrate in their course assignments research skills in conducting a literature review, and critical thinking, analytical and synthesis skills in evaluating the interpretations and limitations of research;
  - 3. Demonstrate their ability to understand, compute, and use quantitative methods of descriptive and inferential statistical analysis and the use of current statistical programs such as SPSS and Excel, as well as qualitative methods of analysis such as phenomenological or content analysis.;
  - 4. Conduct, analyze, and present an original research study, and write a research report of their study in correct APA format;
  - 5. Communicate their critical analyses and applications in presentation and written formats; and
  - 6. Complete both independent and cooperative assignments.

## Students who complete this Numeracy course will be able to do the following:

- 1. Apply both analytical and numerical skills to solve problems.
- 2. Summarize and analyze data in quantitative forms.
- 3. Interpret and draw conclusions from an analysis of quantitative data.
- 4. Represent quantitative information in a variety of forms (e.g. symbolically, visually, numerically, and verbally).
- 5. Incorporate quantitative evidence in support of an argument.

## **COURSE CONTENT**

Week	Reading/s	Topic / Work due	
1	Cozby & Rawn, Ch. 1	Scientific Understanding of Behaviour	
		Lab: Data collection	
2	Cozby & Rawn, Ch. 2 + 3	Where to Start; Ethical Research	
		Lab: TCPS 2	
3	Cozby & Rawn, Ch. 4 + 5	Studying Behaviour; Measurement Concepts	
		Lab: Correlation	
4	Cozby & Rawn, Ch. 7	Quantitative Research Designs I: Survey Designs Lab:	
	-	Research topic/question/hypothesis	

5-6	Cozby & Rawn, Ch. 8 + 9	Quantitative Research Designs II: Experimental Designs Lab: <i>t</i> test <b>Due:</b> Research topic & question/hypothesis/
		prediction
7	Pg. 226-228	Mid-term / Program evaluation
7	Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. <i>Qualitative Research in</i> <i>Psychology, 3,</i> 77-101.	Qualitative Research Designs I: Thematic Analysis / Ethnographic Designs / Mixed Methods Designs Lab: Thematic analysis
8	Creswell, J. W., Hanson, W. E., Plano Clark, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. <i>The Counseling</i> <i>Psychologist, 35(2),</i> 236-264.	Qualitative Research Designs II: Phenomenological Designs/ Grounded Theory Designs/ Narrative Designs/ Action Research Designs Lab: Research Proposal <b>Due:</b> Research proposal (including TCPS 2 tutorial certificate)
10	Cozby & Rawn, Ch. 12	Quantitative Data Analysis I: Understanding Research Results: Description & Correlation Data collection class Lab: Descriptive statistics & frequency distributions
11	Cozby & Rawn, Ch. 10, 13-14	Quantitative Data Analysis II: Understanding Research Results: Statistical Inference/ Generalizing Results Lab: ANOVA
12		Qualitative Data Analysis Lab: Research report data analysis
13		Research Presentations Due April 12: Research Report
14-15	Final exam Period	· · · ·

## **EVALUATION PROFILE**

Professionalism*	10%
TCPS 2 tutorial	5%
Mid-term	25%
Final Exam	30%
Research Proposal	5%
Research Presentation	5%
Research Report	20%
TOTAL	100%

\* including lab sessions and assignments

## ASSIGNMENTS:

#### **Professionalism:**

Professionalism includes punctuality, accountability and participation in in-class and lab assignments. Participation and attendance will help with all aspects of the course. Students must assume all responsibility for ensuring course and assignment coverage for the missed class.

# **TCPS 2 Tutorial:**

Prior to conducting your research project, you must complete the TCPS 2 Ethics Tutorial. This is a tutorial for the Tri-Council Policy Statement (TCPS) on Ethical Conduct for Research Involving Humans. The tutorial is free, and takes approximately 2-3 hours to complete (and does not need to be completed in a single session). Attach a copy of your completion certificate to your research proposal document. No late submissions will be accepted for this assignment. All group members must complete the tutorial in order for the group to be able to proceed with their research projects. Keep a copy of the certificate for yourself; you may need this certificate again in future courses. Use this link: http://tcps2core.ca/welcome

## Mid-term and final exams:

There will be a mid-term and a final exam. The exams will consist of questions based on the textbook, lecture material, classroom activities and videos.

# **Research Proposal:**

Working in small groups, you will write a research proposal, indicating your research question/hypothesis, planned research design, data collection, analyses, and research ethics application. Detailed information regarding the research proposal will be given in class and on the course web site. The proposal must be approved before data can be collected.

## **Research presentation:**

Each group will present an overview of their research project, including each step of the process from the formulation of the hypothesis through to the discussion of the results and their potential implications. Detailed information about the research presentation will be given in class.

## **Research report:**

Each student will submit a research report about their study, including the abstract, introduction, methods, results, and discussion sections, as well as relevant appendices. Further details will be given in class.

A+ = 90-100	B+ = 77-79	C+ = 67-69	D = 50-59
A = 85-89	B = 73-76	C = 63-66	F = 0-49
A- = 80-84	B- = 70-72	C- = 60-62	

## **GRADING PROFILE**

## **INCOMPLETE GRADES**

Grades of incomplete ("I") will be given only if there is an arrangement or a written request approved by the instructor prior to the last class in the course or the last week of class.

## LATE ASSIGNMENTS

Marks will be deducted for the late submission of assignments. The penalty for the late submission of an assignment is .5 of a mark per day. After one week, late assignments will not be accepted.

## MISSED EXAMS, QUIZZES, LABS, ETC

Students will be allowed to make-up exams and quizzes only under the following conditions: if a doctor's certificate of illness is provided; if, in the case of the death of a close family member, a death certificate is provided; if **prior** approval of the instructor has been obtained.

# ATTENDANCE

Attendance is essential. Students missing more than two classes can expect a faculty review and may receive no credit.

# **ENGLISH USAGE**

English usage must be clear and grammatically correct.

## **ELECTRONIC DEVICES**

Students may use electronic devices during class for note-taking only.

#### **ON-LINE COMMUNICATION**

Outside of the classroom, instructors will (if necessary) communicate with students using either their official Capilano University email or eLearn; please check both regularly. Official communication between Capilano University and students is delivered to students' Capilano University email addresses only.

## UNIVERSITY OPERATIONAL DETAILS

## **Tools for Success**

Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: <u>https://www.capilanou.ca/student-life/</u>

Capilano University Security: download the CapU Mobile Safety App

## Policy Statement (S2009-06)

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Academic Integrity, Academic Probation and other educational issues. These and other policies are available on the University website.

## Academic Integrity (S2017-05)

Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy S2017-05 for more information: <u>https://www.capilanou.ca/about-capu/governance/policies/</u>

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

**Academic dishonesty** is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

**Cheating**: Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:

- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;
- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,
- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

Fraud: Creation or use of falsified documents.

**Misuse or misrepresentation of sources**: Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

**Plagiarism**: Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

**Self-Plagiarism**: Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

Prohibited Conduct: The following are examples of other conduct specifically prohibited:

- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

## Sexual Violence and Misconduct

All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including B.401 Sexual Violence and Misconduct Policy and B.401.1 Sexual Violence and Misconduct Procedure (found on Policy page <a href="https://www.capilanou.ca/about-capu/governance/policies/">https://www.capilanou.ca/about-capu/governance/policies/</a>)

**Emergencies:** Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.

## **PROGRAM OPERATIONAL DETAILS**

#### **Program Continuance**

Continuance in the Music Therapy program is contingent upon a successful level of completion in academic, clinical and personal areas, as jointly assessed by faculty each term. Consult the Coordinator or the Student Handbook for more information.