# CYC 545 QUANTITATIVE RESEARCH METHODS IN CHILD & YOUTH CARE FALL, 2018

# INSTRUCTOR CONTACT INFORMATION

Instructor Name: Doug Magnuson Office: HSD B124 Phone: 250-721-6479 Email: dougm@uvic.ca

#### **CLASS INFORMATION**

Location: HSD Computer Lab Time: Mondays, 9:30-12:20

#### LEARNING MATERIALS

Healy, K. *Data visualization: a practical introduction. (in press)*. Princeton University Press. This book is available online, at https://kieranhealy.org/publications/dataviz/

# Datacamp.com

These are online tutorials. You will receive an invitation directly from the site that will allow you to participate without any fees. If you sign up independently, without using this invitation, it will cost you \$29.95 USD per month.

## **COURSE DESCRIPTION**

The course prepares students to do quantitative work in professional practice and in Masters theses and to interpret evaluation and research that uses quantitative data. The aims are to learn to use data analysis methods to help you think about the work, to learn to interpret research and evaluation, to prepare for masters thesis, and to develop confidence in your abilities.

## PEDAGOGY

Experiential learning depends on successive approximation and immersion in data analysis exercises. Class time is devoted to learning skills, problem solving, and helping you get ready for the next set of exercises. It is important that you be willing to try things, not to worry about mistakes, and to ask me and classmates for help when you have trouble.

# **SCHEDULE**

Date	Content	Readings and Assignments
Sept 10	Overview and Intro	Course Spaces, see September 10
	Downloading and Installing R	

Sept 17	Working in R	Datacamp: Introduction to R Datacamp: Introduction to the Rstudio IDE Healy: Preface
Sept 24	Data Visualization Principles	Healy, ch. 1
Oct 1	Reproducibility	Datacamp: Reporting with RMarkdown Healy, ch. 2
Oct 8	Thanksgiving	Healy, ch. 3
Oct 15	Data visualization and the "right" numbers	Healy, ch. 4
Oct 22	Chart Sophistication	Healy, ch. 5
Oct 29	Modelling	Wickham, ch. 24, modelling
Nov 5	Modelling 2	Statistical Modelling in R, from Datacamp.
Nov 12	Reading Break	TBA
Nov 19	Dressing Up Your Visualizations	Healy, ch. 8
Nov 26	Exploratory Data Analysis	Datacamp: Exploratory Data Analysis
Dec 3	Exploratory Data Analysis Practice	

#### GRADING INFORMATION

Practice Exercises, (30%)

At the end of the textbook chapter assigned for most weeks are suggestions for further practice. I will assign one or more of these each week. These will be produced in Rmarkdown.

Exploratory Data Analysis Project (25% mid-term, 45% final)

In the first month of the course you will choose a dataset to use for this project from resources available on the McPherson library data services page, from Kaggle, or other sources on the web. On Course Spaces there are other sources listed under *Data Sources*.

For the mid-term project, clean up the data so it is ready to analyze, create some initial charts that help suggest some direction for further analysis, and write a one-page proposal for the final project. That proposal should include a brief summary of the dataset, a description of what you think you know, based on your initial explorations, and a description of the questions you intend to explore in the final project. You will present your ideas to the class.

Mid-term page length: maximum 5 pages. Final page length: maximum 20 pages

#### University Academic Policies

- 1. UVic Grading Scale
- 2. Evaluation of Student Course work (Review of Assigned Grade)
- 3. Appeals
- 4. Academic Concessions
- 5. Academic Integrity
- 6. Centre for Accessible Learning (CAL)
- 7. BC Freedom of Information and Protection of Privacy

#### **HUMAN & SOCIAL DEVELOPMENT POLICIES**

- 1. HSD Guidelines for Professional Conduct
- 2. **Practicum Courses**: If this is a practicum course, please see the <u>HSD regulations concerning practica</u> in the current calendar and information on <u>criminal records checks</u> in the calendar and in the <u>practicum area</u> of our website.

# 3. Child and Youth Care policies

The School of Child and Youth Care fosters a welcoming and positive learning, teaching and working environment for all its members. In all aspects of your participation within the School of Child and Youth Care, it is expected that you will incorporate the principles of respect for diversity, equity, and inclusion. Our policies, guidelines and resources are intended to support you in your learning journey, helping you to understand expectations and providing you with easy access to some of the resources you may need. If you have any questions or concerns, our tips for helping students resolve concerns may prove useful. Remember, a solid understanding of school and university policies will help you succeed in this course and in your program. With this in mind, students taking School of Child and Youth Care (SCYC) courses are required to read and adhere to the following policies:

- All academic policies in the university calendar including the <u>General University Policies</u> (see left navigation bar), HSD Faculty Academic Regulations, and SCYC Academic Regulations
- All graduate policies located on the School website and within this course syllabus.

NOTE: The School and your instructor will abide by the <u>BC Freedom of Information and Protection of Privacy Act.</u>

#### ASSIGNMENT COMPLETION EXPECTATIONS

#### **Assignments**

- 1. Each assignment is due on the specified date. University policies state that extensions will be given only in situations of medical or family emergency with instructor consultation before the due date for the assignment. If, due to extenuating circumstances, you are unable to meet an assignment due date, you must negotiate a formal extension before the original assignment deadline with your instructor specifying the conditions for completion of the assignment. (In case of illness, documentation by a physician may be required.)
  - a. Assignments after any due date without negotiation will drop five percentage points per day late and after three days will be graded "0".
  - b. Extensions will normally not exceed one week beyond the assignment due date.
  - c. The instructor has final discretion on granting extensions.
  - d. Grounds for granting extensions will usually be limited to family and medical emergencies.
- 2. Assignments with a new negotiated due date need to be submitted to the instructor with a date stamp (when turned in to the front office counter) or email/drop-box submission date no later than the negotiated date or they will not be accepted. Students may be asked to provide medical proof or other substantiating documents for papers with new negotiated due dates. Grade deferrals will only be considered in extreme, documented circumstances.
- 3. You must complete all assignments and requirements to pass each course. A letter grade of "N" will be given if any assignment has not been received by the completion of the course and for which you have not negotiated an extension with your instructor. This is calculated as "0" in your grade point average (GPA).

#### **Deferrals**

It is the School of Child and Youth Care's policy that, in order to be considered for deferred status, students must:

- have completed at least 50% of the coursework at the time the deferral is requested
- have met with the course instructor and agreed on dates for the submission of the outstanding work. The dates are to be recorded in the student's file. School policy on the submission of assignments (and penalties) applies to these dates.
- have submitted a request for academic concession form to Record Services with appropriate support documentation no later than 10 days after the end of the examination period for that term.
- University policy requires that deferred grades be submitted no later than the end of the term following the session in which the deferral is granted. There will be no exceptions made to this policy.
- The instructor who was responsible for the section of the course in which the student was registered is responsible to grade the deferred work provided it is submitted within the time period set by the university. The instructor is not expected to provide course materials or tutorials to students whose grade was deferred.

# **RESOURCES**

- 1. Indigenous Student Support Centre
- 2. Centre for Accessible Learning
- 3. Counselling Services
- 4. Centre for Academic Communication
- 5. Library
- 6. Ombudsperson
- 7. Computer Help Desk
- 8. Technology Integrated Learning (online learning resources)

# **RETAIN YOUR SYLLABUS**

Course syllabi are required documents for course challenges and may be required when applying to other institutions and graduate schools. It is important that you retain this syllabus for documentation of your course description, content and readings. The School of Child and Youth Care does not retain copies of all course syllabi. There is a minimum \$25 administration fee charged for copies of archived course syllabi.