

LAKEHEAD UNIVERSITY

DEPARTMENT OF SOCIOLOGY

Sociology 3311 WAO Research Techniques and Data Analysis Term 2 = January 8 to April 6, 2018

Course Facilitator: **Dr. Kevin Willison**, B.A. (Hon.), M.A., Ph.D.

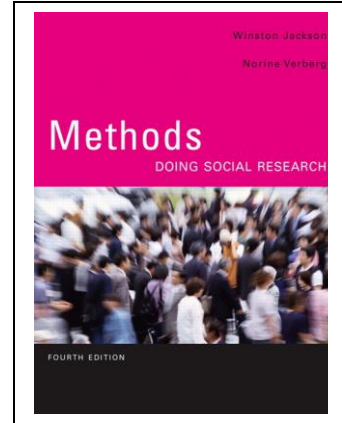
URL: https://www.researchgate.net/profile/Kevin_Willison/

Instructor's e-mail: kdwillis@lakeheadu.ca

Course Credit Weight = 0.5

Class Room: OA 2010 (500 University Avenue – Simcoe Hall building)

Class Time: **Tuesdays and Thursdays: 2:30 until 4 PM**



* **Instructor's Office Hours: by appointment** (mutually arranged via e-mail). Please be sure to use your LU e-mail account (to verify registration with Lakehead University).

Course Description:

Sociology 3311 WAO is designed to provide students with a preliminary / basic understanding of the skills and knowledge required to carry out quantitative data analysis. It includes the organization and presentation of data, levels of measurement, measures of central tendency, measures of variability, percentiles and z-scores, the normal distribution, random sampling distributions, parametric and non-parametric statistical procedures, probability, and statistical inference / correlation. There are two required computer assignments, which will be completed using SPSS (Statistical Package the Social Sciences) software.

- SPSS requires an operating licence and therefore is *not* available on all campus computers.
- The SPSS lab assignments for this course will be conducted in OA 1002 (computer lab - located near the LU Orillia library).
- Please refrain from wearing perfume in enclosed areas, such as the lab. Some people (like your instructor) may be very sensitive to the smell.
- Do not eat nor drink in the lab as this may get crumbs and stains on the keyboard(s).

Students will be expected to conduct simple mathematical procedures (namely: addition, subtraction, division, multiplication, use of square root and the correct mathematical order of operations – aka “BEDMAS”). Have a calculator that has the capacity to perform square roots. Please bring writing materials, a working calculator and your required textbook to all classes.

Key Learning Objectives:

- [i] Determine which statistical procedure(s) are suitable for which purpose.
- [ii] Evaluate via being able to analyze / calculate “simple” statistics / mathematical solutions using a calculator and/or use of SPSS.
- [iii] Learn how to interpret results (for example, when to accept or reject an hypothesis).

Class Participation:

Participation includes: completion of assigned homework questions; asking questions, answering questions, and thinking about implications. It is important to come to class with some notes and reflections on the material. Questions and teamwork are strongly encouraged.

Assignments:

An emphasis will be on the application of the many concepts and techniques covered in class and through the required readings found in your textbook. Through two SPSS assignments, which account for 15 % (total) of your final grade, you will have an opportunity to apply what you have learned, and subsequently obtain some feedback. Requirements for both assignments will be discussed in class. Once submitted, each will be marked and returned to you in class. Students should meet with the instructor to discuss any difficulties or concerns (in advance of the due date). Collaborating with your colleagues is strongly encouraged.

Short Tests:

There will be three tests throughout the term. They will contain multiple choice and some short answer questions. Your three tests plus exam account for 85 percent of your total grade.

Required Text:

Winston Jackson and Norine Verberg (Editors). Methods – Doing Social Research. Fourth Edition, Pearson / Prentice Hall, 2007. ISBN: 0-13-187925-1 (pbk)

<http://catalogue.pearsoned.ca/educator/product/Methods-Doing-Social-Research/9780131879256.page>

- See picture of required text on first page of this outline.
- The required text is available at the Orillia campus bookstore.
- Please be sure to purchase the fourth edition.

Suggested Text: If planning to do research in the future, the following is highly recommended: **Wayne Booth, Gregory Colomb, Joseph Williams, Joseph Bizup and William T. FitzGerald (Editors). The Craft of Research. Fourth Edition. Chicago/London: The University of Chicago Press. ISBN: 13- 978-0226-065663.**

Publisher Textbook Description:

“In this thoroughly updated new edition of one of the few Canadian research methods texts published for undergraduate courses, sufficient information is provided to give students an inclusive, generous view of the full range of social science approaches and research designs, both quantitative and qualitative.” Source: see link under “required text.”

Potential Supplementary Readings: If any, added required public domain reading material for this course will be made available on D2L or may be found online through the Lakehead University library system, or as made available on short-term loan via the LU (Orillia) Library – Simcoe Building. Your instructor will advise you of added reading required (please attend class).

WINTER Academic Term (in General) - Important Dates: (2018)

Term TWO at LU - Start Date	Monday January 8
Term TWO – Break TWO	No classes during: Feb. 19 – 23
Easter Weekend	No classes Fri. March 30 / Mon April 2
Winter Term – Final Class at LU	Friday April 6
Winter Term – Exam Period	April 13 to 24

Sociology 3311 Course Requirements: (Winter, 2018)

Description:	Scheduled Date:	Course % Value
Winter Term – Test 1	January 25 (Thursday)	20 Percent
SPSS – ASSIGNMENT 1	February 8 (Thursday)	5 Percent
Winter Term – Test 2	February 15 (Thursday)	20 Percent
SPSS – ASSIGNMENT 2	March 27 (Tuesday)	10 Percent
Winter Term – Test 3	March 29 (Thursday)	20 Percent
SOCI 3311 April 2018 - 2-hour Exam	Scheduled by Registrar	25 Percent

Note 1: Tests 1-3 plus your final exam will cover: (a) material presented in class; (b) posted D2L material; and (c) required text readings.

Note 2: As a university-level course, and due in part to time constraints and the volume of students, there are NO make-up tests or exams, nor added assignments available.

* **TIPS:** best to attend classes regularly, and do often check your course D2L site.

- Be sure to pick up each of your 3 completed tests, once graded, to re-review.
- Remember to bring your LU student ID card to class for tests and the exam.
- Cellphones and other electronic devices are not allowed in the classroom during tests and the final exam.

Accommodations / Special Needs:

Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all academic activities. If you think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) first. Register as early as possible. For more information, please visit: <http://studentaccessibility.lakeheadu.ca>

Your instructor - Dr. Kevin Willison - has received specialized training in AODA (the Accessibility for Ontarians with Disabilities Training Act).

Emergency? Know the Number to Call

In case of emergency Security can be reached through any phone on campus, through emergency intercoms in Simcoe Hall and, also in the parking lot. Their direct extension is 2009.

Paramedics, firefighters and police officers do not always know where to find certain buildings or locations on our campuses. By calling ext. 2009 Lakehead Security will quickly dispatch a security guard to your location and contact 911 services. Lakehead

Security will then meet and escort emergency services to your location to save valuable time.

Parking: There is a flat fee/day for parking in the Lakehead Orillia lot, \$5/day (there is a kiosk at the entrance of the parking lot in which you would pay (by cash or a credit card) to get a day pass. Parking spaces are on a first come/first served basis, and the lot is monitored by security throughout the day (they do ticket!) Parking is free in the evenings (from 5 PM through to 8 AM).

IT Issues – LU E-mail Accounts and Accessing “Desire2Learn” – D2L

Information Technology (IT) (at Lakehead is referred to as **TSC**) can be reached through any campus phone by pushing the **Helpdesk** button. Should TSC related problems arise you may also contact “Help Desk” at **ext. 7777** (on campus) – or tel. 705-330-4008 (then the extension). Only **Help Desk** can assist you with your specific TSC issues and concerns. Note: your course instructor has no control over encountered IT/TSC problems.

General E-mail and Classroom Conduct Guidelines:

[1] Within all e-mail correspondence (not just for this course) it is advisable to follow “the ten commandments of ***e-mail netiquette***.”

Please review: <http://www.studygs.net/netiquette.htm>

[2] All e-mail communication sent from students to the instructor for this class must originate from the student’s own Lakehead University e-mail account. This policy protects confidentiality and confirms the identity of the student. It is the student’s responsibility to ensure that communication is sent to the university from a Lakehead University account. If an instructor becomes aware that a communication has come from an alternate address, the instructor may not reply, at his or her discretion.

[3] Please be sure to identify yourself in your e-mail (not only your name but also what course you are in, as your Instructor teaches more than one course, and has many students). This will help speed up a response. Thank you in advance.

[4] The course instructor may best be reached at: kdwillis@lakeheadu.ca. I will do my best to respond to your e-mail within 8 hours (or less) of receipt (based on e-mails received between 9am – 5 pm, Monday to Friday). Due to teaching, meetings and research related activities please do not expect your instructor to provide an instant / immediate response. * Note: your Instructor’s course teaching schedule is posted within your course D2L.

[5] Please be advised that you will may *not* get a response e-mailing the Instructor the night before a test or exam. Please plan ahead.

[6] Please do not expect a quick e-mail response if sending an e-mail to an Instructor on a Saturday or Sunday. On weekends Instructors often have other obligations.

[7] As per LU policy, your specific **grades/marks will not be discussed over the internet / e-mail**. Please talk to your instructor directly on such matters. Individual course marks (when ready) can be accessed using your unique course D2L account.

[8] Please refrain from sending e-mails / texting / watching movies etc. during class time. Make use of your class time and computer wisely. Not only is it best to focus on the course material during class, texting or viewing inappropriate material on your

devices / computer may bother / disturb others around you, particularly those sitting behind you and/or beside you.

[9] Unless in a group work session, please refrain from talking to others when the instructor is talking, as others around you may have difficulty hearing and/or be disturbed.

[10] **Have a question?** If the instructor is talking/instructing please be patient and I will respond to comments/inquires. Your questions are valued and encouraged!

Missed Tests and/or Exams:

Make-up tests and final examination will only be given with written documentation from a healthcare practitioner using the official Student Health Certificate, available at: <http://registrar.lakeheadu.ca/uploads/docs/F.HealthCertificate.pdf>.

Religious Observance Policy: If you require religious accommodation(s), you must make your request to the instructor preferably within the first two weeks of class.

Course Suggestions or Concerns? Students are asked to speak with their Instructor directly should there be a suggestion, problem or concern regarding the course which you feel may benefit yourself and/or the class. Feel free at any time to speak to your class Instructor (as he or she may simply be unaware). Further, you are encouraged to ask questions and be engaged in each class (as this can help to learn new material).

Weather: The *Weather Network* is a good site:

<http://www.theweathernetwork.com/weather/caon0506>

- **It is best** to refer to the Lakehead University (Orillia) home page website to check for class cancellations.

See: <http://www.lakeheadu.ca/>

**** As a university-level course, regular class attendance is strongly recommended.**

- Within each section/module as described below, focus on key terms and their interconnections with other terms.
- For improved comprehension and memory, be sure to review your required text and/or assigned reading(s) prior to (and after) attending each class.
- Classroom discussions will be encouraged, as shall critical thinking.
- The course Instructor has the right to modify (add/subtract) section/module content(s). This may transpire as new/relevant content may arise as the course progresses. I will alert the class of such in advance (in class).
- Not all sections/modules (as denoted in this outline) may be covered. Your final exam in April will only cover sections/modules covered during the term (since the start of January 2018).
- Reminder: your April (2018) exam (for this course) covers three areas: (a) material presented in class; (b) posted D2L material; and (c) required text readings (as assigned throughout the term). **Tip:** similar questions from your previous tests (howbeit potentially re-worded) will be on your exam, so be sure to know the correct answers. New questions will of course be added.
- Remember to bring your calculator to all tests, and to the final exam.

COURSE SYLLABUS: ↓↓

Section/Module	Material
ONE	<ul style="list-style-type: none">• D2L Basics.• Course outline and student expectations.• Instructor expectations.• Introduction and Basic Math Operations [BEDMAS] <p><u>WE WILL START AT CHAPTER EIGHT</u></p> <p>Chapter 8 [A] - review (pages 211-247)</p> <ul style="list-style-type: none">➔ Levels of measurement.➔ Measures of central tendency.➔ Measures of dispersion.➔ Intro to parametric statistics.➔ The normal distribution.➔ Z scores.➔ Areas under the normal curve.➔ Other distributions (with an intro to non-parametric statistics).
SPSS Module	<ul style="list-style-type: none">• SPSS Basics <p>Chapter 16 - review (pages 418-437)</p> <ul style="list-style-type: none">➔ Analyzing data without a computer.➔ Analyzing data with a computer.
TWO	<ul style="list-style-type: none">• D2L PowerPoint: "Statistical Relationships." <p>+ Chapter 8 [B] - review (pages 233-247)</p> <ul style="list-style-type: none">➔ Contingency Tables (cross-tabs).➔ Comparing means.➔ Correlational analysis.➔ Computing Spearman (on SPSS).➔ Computing Pearson (on SPSS).➔ Partial correlations.
THREE	<p>Chapter 9 [A] - review (pages 250-256)</p> <ul style="list-style-type: none">➔ Tests of significance.➔ Research hypothesis and null hypothesis.➔ The sampling distribution.➔ One and two-tailed tests of significance.
FOUR	<p>Chapter 9 [B]- review (pages 256-262)</p> <ul style="list-style-type: none">➔ The Chi-square test.

FIVE	Chapter 9 [C] - review (page 263) → The T Distribution. → Between-Subjects T-test. → Within-Subjects T-test. → T-Test Pairs.
SIX	Chapter 9 [D] - review (page 265) → The F Distribution. → One-way analysis of variance. → Simple analysis of variance. → Analysis of variance with additional variables.
SEVEN	<ul style="list-style-type: none"> • Skip now to Chapter 13. → <u>Measurement</u> → Review pages 348-375.
EIGHT	<ul style="list-style-type: none"> • Skip now to Chapter 15. → <u>Sampling and Sample Size</u> → Review pages 403-415.
NINE	<ul style="list-style-type: none"> • Skip now to Chapter 10. → <u>Bias</u> (review text pages 280-302). → Sources of bias in the research process. → Rules for minimizing bias.
TEN	Chapter 11 - review (pages 303-325) → <u>Ethics</u> → Ethics Guidelines (e.g. the TCPS-II)