Psychology 2101
Statistical Methods for Behavioural Research
2016-17[1]

Professor: Dr. Ron Davis
Office: Department of Psychology, Nursing Building, Room SN1010,
Office Hours: Monday and Wednesday 3-3:45pm or by appointment
Lectures: Nursing Building, Room SN1015, Monday and Wednesday 4-5:20pm
Phone: 343-8646
email: ron.davis@lakeheadu.ca
Website: www.MyStatLab.com

Welcome to Psychology 2101 as we explore the use of statistics in the context of psychological science. This syllabus outlines the important bits you need to know about the course.

Course Objectives: In this course you will gain the following:
1. The ability to understand some statistical analyses in reports of psychological science and in other fields of research.
2. The ability to identify the appropriate statistical procedure for many basic research situations, and to carry out the necessary computations.
3. Further development of your quantitative and analytic thinking skills.
4. Develop a basic proficiency with the Statistical Package for the Social Sciences (SPSS) software, an essential tool for the researcher.
5. Preparation for more advanced courses in statistics and research methods.

Required Materials:
1. Aron, A., Coups, E., & Aron, E. (2013) *Statistics for Psychology Plus MyStatLab with eText – Access Card Package,* 6th edition. Upper Saddle River, NJ; Pearson. ISBN: 9780205924172
2. *MyStatLab* online material (see account registration instructions on p. 8)
3. A simple calculator that does the basic functions (add, subtract, multiply, divide) plus the square root function. Higher-end calculators that have built-in statistical functions will be of little additional benefit, and they might even hinder both your ability to learn and your performance on the tests and exams if you use certain of those preprogrammed functions. Bring calculator to each class.
4. One pack of 3" x 3" sticky notes. Bring to each class.

Methods of Instruction:
1. Class lectures: Monday and Wednesday of each week, 4:00 – 5:20pm in Nursing Building room SN1015. The textbook is very closely followed in

---

[1] This version of the course syllabus was created September 8, 2016.

the lectures. You are advised to read relevant sections of the textbook before attending the lecture. Lecture PowerPoint presentations will be made available on www.MyStatLab.com in electronic PDF form.

2. Computer labs: Required attendance for the duration of the course on those 14 days specified in the lab timetable on p. 6. Your attendance at the labs will be taken and this counts toward your overall grade. Absolutely no switching between lab sections without first consulting your Graduate Assistant (GA). Lab sections commence Friday September 16 and Tuesday September 20. Bring your textbook to each lab.

Basis of Evaluation:

1. **Tests:** Four in-class tests, each weighted as follows:
   a. 4% for 4th rank (worst) personal test performance
   b. 8% for 3rd rank…
   c. 12% for 2nd rank…
   d. 16% for 1st rank (best) personal test performance
   The 4 tests combined represents 40% overall contribution toward final grade. Each test is noncumulative and will only cover the material since the last test or exam.

2. **Exams:** Two exams during exam periods, each weighted as follows:
   a. 13% for 2nd rank (worst) personal exam performance
   b. 20% for 1st rank (best) personal exam performance
   The 2 exams combined represents 33% overall contribution toward final grade. The exams cumulative, covering material from the entire semester. As with the tests, exams consist of multiple-choice items, short and longer written answers including computational questions.

3. **Labs:** Fourteen computer labs, each contributing 0.75% towards your final grade: 14 labs x 0.75% = 10.5% overall contribution. You will complete the lab assignment on lab premises at the scheduled day and time. A person missing the lab(s) gets no attendance credit. There are no makeup opportunities for a missed lab. You must attend the lab section that you are registered in; no lab switching.

4. **Homework:** Fourteen homework assignments, each contributing 0.75% towards your final grade: 14 assignments x 0.75% = 10.5% overall contribution. These homework assignments will be made available to you on www.MyStatLab.com 7 days before the due dates listed in the timetable on pp. 5-6. You will answer all questions online and submit online by 11:59pm on the specified due date. There are no opportunities for time extension and you will receive a zero for any assignment that is not submitted on time.

5. **Quizzes:** Ultra brief quizzes comprising 1-3 questions will be given during each class. At the end of each class, a random sampling of students in attendance will be instructed at that time to hand in their answers to the quiz for that class. For each semester, you can expect to be randomly sampled (according to student number) on 4 different classes and

required to write your answers on a sticky note, hand in, and show your student ID card. Answers to be marked as follows: 1 = answer(s) correct, 0.5 = answer(s) incorrect, 0 = no answer: Out of these 4 quizzes per semester, your worst performing quiz will be excluded, and the sum of performance on the remaining 3 quizzes will be calculated: 3 quizzes x 2 semesters = 6% overall contribution. On any given class you will have about a 20% chance of being called upon to hand in your answers to the quiz for that class. Failure to attend a class when you are sampled results in a mark of zero for that quiz. There are no makeup opportunities for a missed quiz.

All of the above five bases of evaluation sum to 100 possible marks for your final grade.

Bonus points: You may earn up to 5 additional bonus points to be added to your final mark in one of two ways:
1. Participate in Psychology Departmentally approved research studies that are posted throughout the academic year on http://lupsych.sona-systems.com where an account has already been created for you. Must complete participation in studies by April 7, 2017.
2. Submit a synopsis of a recent journal article. This involves choosing a journal article published in 2015 onward that interests you, write a 500-word (2 pages double spaced) critical commentary about that article, and submit a hard copy of your synopsis to Dr. Davis along with a copy of the article not later than April 7, 2017. See an example of a synopsis posted on www.MyStatLab.com. Each submitted synopsis is worth 1.67 bonus points.

Accommodations: 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 of their academic activities. If you think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please visit: http://studentaccessibility.lakeheadu.ca (SC0003, 343-8047 or sas@lakeheadu.ca)

Tips for Success in this Course:
1. Read the assigned textbook material, and closely follow the numeric examples given in the text. Reading statistics requires close study and re-reading, not just reading through once as you might an ordinary book. You will also find it very helpful to work the *How are you doing?* problems as you complete each section of the textbook chapters.
2. Regularly work your "study plan" and "quizzes and tests" sections on www.MyStatLab.com

3. Complete the 14 online homework assignments. Also attend and complete the 13 labs. Statistics is a skill – it is necessary to DO statistics, not just read about it.
4. Attend lectures and labs, listen closely, ask questions – but be sure to have done the reading *first.* Don't wait until it's too late to ask for help from your GA or to ask questions of the professor. Don't fall behind!

Now for the Stern Stuff (though for most of you, these will not be an issue):
1. All lectures and labs start on time so punctuality is expected of you. Routinely arriving late and/or leaving early will not be tolerated.
2. If you must leave a class early due to some "unforeseen emergency", quietly vacate the premises.
3. Don't plan on being away from Lakehead University before the last day of exam period during the fall and winter semesters as indicated in the timetable below. The Registrar's Office sets the dates for exams, and it is through that Office that the dates and times are communicated to students about the exams.
4. Don't miss any firm deadlines for attending labs, submitting online homework assignments, or taking in-class tests and exams. If you do, you will automatically get a grade of zero (0) for what you missed. The ONLY two exceptions to this late/absentee policy are as follows:
   a. You talk to the professor IMMEDIATELY as soon as you become aware that you are going to have to unavoidably miss a test or exam because of personal reasons for which compassionate grounds for excuse will be discussed and considered IN PERSON with the professor, and not via telephone or email.
   b. You present in person to the professor (for an in-class test) or to the Registrar (for the final examination) a health care practitioner's note excusing you from the scheduled test or exam on health grounds not more than 7 days after the test or exam in question. See the Lakehead University *Medical Certificate Policy* at https://www.lakeheadu.ca/current-students/student-health-and-counselling-centre/centre-policies-committees/medical-certificates
5. You are encouraged to ask questions, but you need to address your GA or professor in person. The opportunity to talk in person ensures you will get the answers or help you are looking for. Email questions about course content do not allow for this crucial kind of dialogue, therefore don't send any.
6. Academic dishonesty is a serious breach of the Code of Student Behaviour and Disciplinary Procedures. See http://navigator.lakeheadu.ca/Catalog/previouscals/2005-2006/contents/regulations/univregsIXacdishon.html

Fall Class Lecture Timetable:

Date	Class Topic	Reading	Homework Due Date & Assignment#[2]
W[3] Sept. 7	Introduction		
M 12		Web Ch 1[4]	
W 14	Displaying Data	Text Ch 1	
M 19		1	
W 21	Central Tendency & Variability	2	W Sept. 21; #1
M 26		2	
W 28	Ingredients for Inferential Statistics	3	W 28; #2
M Oct. 3		3	T Oct. 4; #3
W 5 In-class test on material covered to date.			
Week of Oct. 10 is fall study week.			
M 17	Introduction to Hypothesis Testing	4	
W 19		4	W 19; #4
M 24	Hypothesis Tests with Means	5	
W 26		5	W 26; #5
M 31	Making Sense of Statistical Significance	6	
W Nov. 2		6	
M 7		6	T Nov. 8; #6
W 9 In-class test on material covered since last test on Oct. 5.			
M 14	*t* Tests: Single & Dependent Means	7	
W 16		7	
M 21		7	
W 23	*t* Tests: Independent Means	8	W 23; #7
M 28		8	
W 30		8	
M Dec. 5		8	T Dec. 6; #8
Dec. 8 - 18 Fall examination period. This cumulative exam date is TBA.			

Winter Class Lecture Timetable:

M Jan. 9	Introduction to ANOVA	9	
W 11		9	
M 16		9	
W 18		9	W Jan. 18; #9

---

[2] Your completed online homework assignment must be submitted through www.MyStatLab.com not later than 11:59pm on the date indicated.

[3] M = Monday, T = Tuesday, W = Wednesday.

[4] Available on www.MyStatLab.com as etext Chapter W1. Scroll down in table of contents to *"Overview of the Logic and Language of Psychology Research".*

M 23	Factorial ANOVA	10	
W 25		10	W 25; #10
M 30		10	
W Feb. 1 In-class test on material covered since last exam.			
M 6	Correlation	11	
W 8		11	
M 13		11	
W 15	Prediction	12	W Feb. 15; #11
Week of Feb. 20 is winter study week.			
M 27		12	
W March 1		12	W March 1;#12
M 6 In-class test on material covered since last test on Feb. 1.			
W March 8	Chi-Square Tests	13	
M 13		13	
W 15	Transformations & Rank-Order Tests	14	W 15; #13
M 20		14	
W 22	Advanced Statistical Procedures	15	W 22; #14
M 27		15	
W 29		15	
M April 3		15	
W 5		15	
April 10 – 23 Winter examination period. This cumulative exam date is TBA.			

Computer Lab Timetable:

Lab #	Tuesday Lab L-Y2	Friday Labs L-Y1, Y3, Y4	Reading
Orientation	Sept. 20	Sept. 16	-
1	Sept. 27	Sept. 23	Text Ch 1
2	Oct. 4	Sept. 30	2
3	Oct. 25	Oct. 21	3 & 4
4	Nov. 8	Nov. 4	5
5	Nov. 29	Nov. 25	6,7
6	Dec. 6	Dec. 2	8
7	Jan. 24	Jan. 20	9
8	Jan. 31	Jan. 27	10
9	Feb. 14	Feb. 10	11
10	March 7	March 3	12
11	March 21	March 17	13
12	March 28	March 24	14
13	April 4	April 7	15

![Lakehead University | Faculty of Health and Behavioural Studies]

Computer Labs:

Lab Section	Day	Time	Graduate Assistant (GA)
L-Y1 in AT-3001	Friday	3:30-4:30pm	Rachel Kushnier
L-Y2 in AT-3002	Tuesday	11:30am-12:30pm	Alexandra Popowich
L-Y3 in AT-3001	Friday	2:30-3:30pm	Alexandra Kruse
L-Y4 in AT-3002	Friday	1:30-2:30pm	Samantha Chong

GA Contact Information:

Samantha Chong	smchong@lakeheadu.ca 2101samantha@gmail.com
Alexandra Kruse	askruse@lakeheadu.ca 2101alexandra@gmail.com
Rachel Kushnier	rbkushni@lakeheadu.ca 2101rachel@gmail.com
Alexandra Popowich	adpopowi@lakeheadu.ca 2101alliep@gmail.com

www.pearsonmylabandmastering.com

P Pearson

Student Registration Instructions
Pearson's MyLab & Modified Mastering

MyStatLab®

To register for Psychology 2101:

1. Go to www.pearsonmylabandmastering.com.
2. Under Register, select **Student**.
3. Confirm you have the information needed, then select **OK! Register now**.
4. Enter your instructor's course ID: davis62875, and **Continue**.
5. Enter your existing Pearson account **username** and **password** to **Sign In**.

   You have an account if you have ever used a Pearson MyLab & Mastering product, such as MyMathLab, MyITLab, MySpanishLab, MasteringBiology or MasteringPhysics.

   ➢ If you don't have an account, select **Create** and complete the required fields.

6. Select an access option.

   ➢ Enter the access code that came with your textbook or was purchased separately from the bookstore.
   ➢ Buy access using a credit card or PayPal account.
   ➢ If available, get temporary access by selecting the link near the bottom of the page.

7. From the You're Done! page, select **Go To My Courses**.
8. On the My Courses page, select the course name **Psychology 2101** to start your work.

To sign in later:

1. Go to www.pearsonmylabandmastering.com.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select the course name **Psychology 2101** to start your work.

To upgrade temporary access to full access:

1. Go to www.pearsonmylabandmastering.com.
2. Select **Sign In**.
3. Enter your Pearson account **username** and **password**, and **Sign In**.
4. Select **Upgrade access** for **Psychology 2101.**
5. Enter an access code or buy access with a credit card or PayPal account.