



Class Information		Instructor Information		First day of classes:	Wed., Jan. 6, 2016
Lectures:	Wed/Fri 2:30-3:45pm A2131	Instructor:	Brianne M. Collins, MSc PhD Candidate	Last day to add/ drop/change to audit:	Sun, Jan. 17, 2016
Labs:	Mondays 1:00-2:15pm A2131	Email:	bcollins@ambrose.edu	Last day to request revised exam:	Mon., Feb. 29, 2016
Final Exam day		Phone:	403-410-2000, ext. 6904	Last day to withdraw from course:	Fri., Mar 18, 2016
N/A		Office:	L2107	Last day to apply for time extension for coursework:	Mon, Mar. 28, 2016
		Office Hrs:	By appointment, or when office door open	Last day of classes:	Wed., April 13, 2016

Recommended Textbook: Nolan, S. A., & Heinzen, T. E. (2014). *Statistics for the behavioral sciences* (3rd Ed). New York, NY: Worth Publishers.

Supplies: Scientific calculator with statistical functions (between \$15-20); graphing calculators may be used, but before each quiz, the instructor must be shown that the memory has been cleared.

Course Description (Academic Calendar):

This course is designed to give students a basic understanding of descriptive and inferential statistics. Emphasis is placed on practical application and students will learn to analyze and interpret basic statistical research. They will also learn to use computer software (SPSS) to analyze data. Lecture and laboratory components.

Expected Learning Outcomes:

By the end of this course, students will have the necessary knowledge and skills to be able to:

- Distinguish between a variety of descriptive measures and inferential statistical tests available in order to determine the most appropriate analysis for a given research question, study design, and data collected
- Analyze quantitative data (with one dependent variable and one or more independent variables) manually using mathematical equations and using a statistical software package (i.e., SPSS)
- Interpret results obtained via statistical analysis and compose accurate and informative results sections that meet disciplinary guidelines

Course Schedule:

PowerPoint notes, lab handouts, and/or assignments will be posted on Moodle by the beginning of lecture/lab. Hardcopies of lab example and lab assignment handouts will be provided for you in lab.

Week	Date	Lecture Topic	Readings for Lecture	Lab Topic (Mondays)	Lab Assignments Due
1	Wed, Jan 6	Course Introduction	Syllabus	---	---
	Fri, Jan 8	Intro to Statistics and Research Design	Chapter 1		
2	Wed, Jan 13	Measures of Central Tendency; Measures of Variability	Chapter 4	---	---
	Fri, Jan 15				
3	Wed, Jan 20	The Normal Distribution and Z-Scores	Chapter 6	Introduction to SPSS (Jan 18)	---
	Fri, Jan 22				
4	Wed, Jan 27	Sampling and Probability Exam #1 Assigned (Feb 5)	Chapter 5	Lab #1 - Descriptive Statistics (Jan 25)	---
	Fri, Jan 29				
5	Wed, Feb 3	Hypothesis Testing Due: Exam #1 and Formula Notebook (Feb 12)	Chapter 7	Lab #2 – Distributions (Feb 8)	---
	Fri, Feb 5				
6	Wed, Feb 10	No Classes (Reading Week)	---	No Lab (Family Day)	---
	Fri, Feb 12				
7	Wed, Feb 17	Confidence Intervals and Effect Size	Chapter 8 (p. 191-205)	---	Lab #2 Due in Class (Wed, Feb 24)
	Fri, Feb 19				
8	Wed, Mar 2	<i>t</i> -tests (one sample; independent) Exam #2 Assigned (Mar 9)	Chapters 9-11	---	---
	Fri, Mar 4				
9	Wed, Mar 9	Analysis of Variance (One-way; Factorial) Due: Exam #2 (Mar 16)	Chapters 12 & 14	Lab #3 - Independent <i>t</i> -tests (Mar 7)	---
	Fri, Mar 11				
10	Wed, Mar 16	Paired <i>t</i> -tests; Repeated Measures ANOVA	Chapters 10 & 13	Lab #4 – One-Way ANOVA (Mar 14)	Lab #3 Due in lab (Mon, Mar 14)
	Fri, Mar 18				
11	Wed, Mar 23	No Class (Good Friday)	---	---	Lab #4 Due in class (Wed, Mar 23)
	Fri, Mar 25				
12	Wed, Mar 30	Paired <i>t</i> -tests; Repeated Measures ANOVA (Cont)	Chapters 10 & 13	No Lab (Easter Monday)	---
	Fri, Apr 1				
13	Wed, Apr 6			Lab #5 - Factorial ANOVA (Apr 4)	---

	Fri, Apr 8	Tests of Association; Correlation Exam #3 Assigned (Apr 13)	Chapter 15		
15	Wed, Apr 13				---
16	Wed, Apr 20	<i>No class (final exam period)</i> Due: Exam #3 and Formula Notebook (Apr 20)		---	---

Note: The above course schedule is subject to change. It is important therefore to attend all classes and to check your Ambrose email account and Moodle for updates and/or changes.

Requirements:

Component	% of Final Grade
Lab Assignments (5 x 8%)	40%
Formula Notebook	15%
Exam #1	15%
Exam #2	15%
Exam #3	15%
TOTAL	100%

Note: In order to pass the course, all components of the course must be submitted (and in complete form).

Lab Assignments (5 x 8% = 45%) – Due: Throughout semester (see schedule above/below)

The laboratory component of the course is mandatory and is designed to facilitate experiential learning and practical application of the material. There are five lab assignments required in this course, which together comprise 40% of your final grade. As indicated below, lab assignments will be due in hardcopy either at the beginning of lab or the beginning of Wednesday's class the following week. Handouts with specific instructions (e.g., requirements, formatting, etc) for each lab assignment will be provided and reviewed in the lab in which they are assigned as well as posted on Moodle.

There will no extensions granted for lab assignments, so be sure to plan your time accordingly. Late assignments will lose 10% per calendar day. In the event of illness or extenuating circumstances, students are required to provide the instructor with a doctor's note (or appropriate documentation) excusing the absence no later than a week after the exam date.

Lab Assignment Schedule

Lab	Topic	Date Assigned	Deadline	% of Grade
1	Descriptive Statistics	Mon, Jan 25	Wed, Feb 3 (in class)	8
2	Distributions	Mon, Feb 8	Wed, Feb 24 (in class)	8
3	Independent <i>t</i> -tests	Mon, Mar 7	Mon, Mar 14 (in lab)	8
4	One-way ANOVA	Mon, Mar 14	Wed, Mar 23 (in class)	8
5	Factorial ANOVA	Mon, Apr 4	Wed, Apr 13 (in class)	8
TOTAL				40%

Formula Notebook (15%) – Due in hardcopy on February 12 and April 20

In order to help students grasp the theory and steps involved in statistical calculations and, in turn, facilitate application of calculations to various research scenarios and data, students will be required to create a detailed statistics formula notebook. You will require an 8.5 x 11 coil bound one-subject notebook with roughly 100 pages (available that at Staples or Wal-Mart for less than \$5). You will submit your notebook twice during the semester (once when you submit exam #1, and again with your submission of exam #3). More information (e.g., format, requirements, grading, etc) will be discussed in class and posted on Moodle within the first week of class.

There will no extensions granted for this component of the course and late submissions will not be accepted. As a result, it is highly recommended that students update and add to their notebooks diligently each week. In the event of illness or extenuating circumstances, students are required to provide the instructor with a doctor's note (or appropriate documentation) within a week in order to be given the opportunity to submit the notebook.

Handwritten Take-Home Exams (3 x 15%) – Due: Throughout Semester (see schedule above/below for deadlines)

In order to evaluate comprehension and the ability to correctly calculate and interpret statistical analyses, students will complete three take-home exams throughout the semester. Students are to work independently and will need to submit individual final exams—evidence to the contrary will be considered an act of intellectual dishonesty and all involved will be assigned an automatic zero. Exams will not be intentionally cumulative; however, there is substantial overlap in many cases between concepts and how calculations are completed, meaning that prior understanding of preceding course material is crucial. Take-home exams will be assigned and handed out in class and will be due a week later, in hardcopy, at the beginning of class. Specific details regarding requirements will be provided on each exam. In addition, material to be covered on each exam will be discussed in advance of the date each will be assigned.

There will no extensions granted for exams, so be sure to plan your time accordingly. Late exams will lose 10% per calendar day. In the event of illness or extenuating circumstances, students are required to provide the instructor with a doctor's note (or appropriate documentation) excusing the absence no later than a week after the exam date.

Exam Schedule

Exam	Topic	Date Assigned	Deadline	% of Grade
1	TBA	Fri, Feb 5	Fri, Feb 12	15
2	TBA	Wed, Mar 9	Wed, Mar 16	15
3	TBA	Wed, Apr 13	Wed, Apr 20	15
TOTAL				45%

Attendance and Class Etiquette:

Students are expected to regularly attend lectures and labs. Missing class/lab regularly without adequate rationale will not only impact your ability to successfully complete the course, in extreme cases the instructor reserves the right to ask the student to withdraw from the course.

If you miss a class, you are responsible to contact the instructor by email **in advance** to let him/her know you will not be in class. In addition, you must coordinate with a friend in the class to obtain any notes and instructions missed that day. Failure to communicate with the instructor regarding multiple absences or extenuating circumstances severely limits your ability to receive any accommodation or leniency should the situation normally support such a solution.

Learning and Classroom Etiquette

In the Behavioural Science Department we believe that learning is an active and interactive process; a joint venture between student and teacher and between student and student (i.e., learning is not just “downloading” information from teacher to student). Therefore, it is expected that professors will come to each class well read and prepared to engage students on the topic at hand, giving students the utmost attention and respect. In turn, it is expected that students will take an active role in the learning process. This includes: (a) regular class attendance; (b) reading course material in advance of class; (c) showing up to class on time; and (d) attentively and proactively being “present” at class (i.e., not on the internet, not texting, not conversing with the person beside you). Committing to this type of “active learning” significantly increases the learning experience for both teacher and student, and reflects the Christian ethos of excellence and respect that lies at the heart of the Ambrose educational experience. Failure to adhere to this will result in the instructor either asking the student to leave the classroom for the remainder of the lecture or, in extreme cases (i.e., three or more ‘offenses’), to possibly withdraw from or fail the entire course.

Grade Summary:

The available letters and percentages for course grades are as follows:

Letter Grade	Percentage	GPA	Description
A	96% and above	4.0	
A	91 – 95%	4.0	Excellent
A-	86 – 90%	3.7	
B+	82 – 85%	3.3	
B	75 – 81%	3.0	Good
B-	72 – 74%	2.7	
C+	68 – 71%	2.3	
C	63 – 67%	2.0	Satisfactory
C-	60 – 62%	1.7	
D+	56 – 59%	1.3	
D	50 – 55%	1.0	Minimal Pass
F	Below 50%		Failure

Because of the nature of the Alpha 4.00 system, there can be no uniform College-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor’s assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

Instructor Electronic Communication Policy

Whenever possible, I will respond to all emails within 48 hours during the week (Monday to Friday). In most cases, emails received on weekends will be responded to on Monday. Although I may respond to occasional emails on a weekend (i.e., if I am working on course material during that particular weekend), please remember that responses on a weekend cannot be guaranteed.

In addition, as email is not always a practical means to address questions or concerns regarding course content or requirements, I may email students back with a request to meet to discuss an email in lieu of responding in full via email.

Resources for Students:

Accessibility and Support Services (formerly Learning Services)

The primary mission of Ambrose University's Accessibility and Support Services Centre is to assist students in achieving academic success. It accomplishes this through a wide variety of services and programs. Accessibility and Support Services are available to all students who wish to improve their academic skills and ability to learn, thereby maximizing their academic experience and allowing them to achieve greater academic performance and personal fulfillment. The centre also has as its mandate, the specific and complementary responsibility of providing support for students with learning and/or physical disabilities, and ensure for them equal academic opportunities.

What if I have a Learning Disability or think that I might have one?

If you are already diagnosed with a learning disability then we will work one-on-one with you. This could include any number of accommodations and is specific to each individual. If you are wondering if you do have a learning disability we can work with you to pursue testing and to try different strategies to see if it helps with the challenges you are encountering. It is important to remember that we cannot help you if you do not tell us you are experiencing difficulties. All information is kept confidential and any accommodations are handled discreetly.

What if I have a Physical Disability?

If you have a physical disability we will work with you to determine what we can do to help.

Contact Information

Feel free to drop in to room A2018, Monday through Friday from 8:30am to 4:30pm.

Contact by phone (403-410-2937) or email (accessibility@ambrose.edu).

For more information, please visit: https://ambrose.edu/student_life/learning-services

Counselling Services

Confidential, personal, pastoral, and vocational counseling is available to all students through the Student Development Department. Ambrose substantially subsidizes counseling services; however, there is still a nominal fee of \$30 per appointment that will be charged to your student account at the end of each month, for each scheduled appointment. There is a \$75 fee that will be charged to your student account if you cancel or miss your appointment within 24 hours of your scheduled time. Under extenuating circumstances, if you need to change or cancel your appointment within the 24 hour period, contact Liz Jantzen (ejantzen@ambrose.edu).

How do I book an appointment?

Appointments can be booked online here: <https://my.ambrose.edu/content/counselling-services>.

To book in person visit Liz Jantzen in Student Development (room A2018, Monday through Friday from 8:30am to 4:30pm).

Contact Information

For additional information, please visit: https://ambrose.edu/student_life/counselling-services.

Drop by Student Development in room A2018 (Monday through Friday, 8:30am-4:30pm) and speak to Liz Jantzen if you have any additional questions or concerns.

Policies:

Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline**; please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Exam Scheduling

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devices in class. The professor has the right to disallow the student to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade

An appeal for change of grade on any course work must be made to the course instructor within one week of

receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.