



COURSE OUTLINE

The course description is online @ <http://camosun.ca/learn/calendar/current/web/math.html>

Ω Please note: the College electronically stores this outline for five (5) years only.
 It is **strongly recommended** you keep a copy of this outline with your academic records.
 You will need this outline for any future application/s for transfer credit/s to other colleges/universities.

1. Instructor Information

(a)	Instructor:	Bree Wilton
(b)	Office Hours:	M, Th, F 9:30 – 10:20pm Tu, W 12:30 - 1:20
(c)	Location:	E268
(d)	Phone:	250-370-3502
(e)	Email:	wiltonb@camosun.bc.ca
(f)	Website:	https://sites.google.com/site/breewilton/

2. Intended Learning Outcomes

Upon completion of this course the student will be able to:

1. Compute and interpret descriptive statistics.
2. Perform calculations that apply the basic properties and concepts of probability.
3. Make statistical inferences for one population and two populations.
4. Make statistical inferences for more than two populations (ANOVA).
5. Apply the technique of linear regression in circumstances where appropriate and assess the usefulness of a linear model in these situations using the concept of correlation.
6. Apply basic methods to analyze categorical data.
7. Use the statistical software MINITAB to perform basic data analysis.

3. Required Materials

1. Introduction to the Practice of Statistics by Moore McCabe and Craig Moore, 7e.
2. Lab manual: MATH 216 R Lab Manual available on my website.
3. Sharp EL-531 Scientific Calculator. *No other calculators are allowed for tests and the final examination.*

4. Course Content and Schedule

Looking at Data - Distributions	1.1 – 1.3
Looking at Data – Relationships	2.1 – 2.5
Producing Data	3.1 – 3.4
Probability – The Study of Randomness	4.1 – 4.5
Sampling Distributions	5.1 – 5.2
Introduction to Inference	6.1 – 6.3
Inference for Distributions	7.1 – 7.2
Inference for Proportions	8.1 – 8.2
Analysis of Two-Way Tables	9.1 – 9.3
Inference for Regression	10.1
Analysis of Variance	12.1

R Labs: This course includes 7 lab sessions. You will need the lab manual for each lab. The lab manual is available from my website (given above) under MATH 216. The labs are designed to familiarize you with the use of a computer as a tool for statistical analysis. The computer software we use is R. Each lab session includes a lab assignment to be submitted for marking. Lab assignments must be handed in by **3pm** on the due date. There will be a lab final exam due in the last week of classes.

Homework Assignments: There will be **online** homework assignments to cover basic concepts as well as a few questions from the later chapters to be handed in. Hand in questions are due by **3pm** on the due date. There will also be a set of suggested problems from the textbook. In order to get a full understanding of the course materials **you need to do both sets of homework.**

Attendance: Showing up to class is the easiest and most important thing you can do to help succeed the course. Keeping up is an essential part of any statistics course as much of the material builds on itself. If you feel yourself falling behind at any point during the term, then please do not hesitate to come speak to me.

Math Lab: Math lab **E224** is staffed with math tutors available for **free** help. It is a great idea to do your homework there and get help whenever needed.

Practice Tests: There will be a practice test session on the day before each test. Students are encouraged to ask questions and to work together with peers during these sessions. Solutions for these practice tests will be posted on my website. *You would benefit most from these practice tests if you come to the practice tests with the notes reviewed, all homework problems completed, and a formula sheet made.*

5. Basis of Student Assessment (Weighting)

Assignments (online and hand in)	10%
Labs (5)	5%
Tests (50 min each) (3)	35%
Lab Final	10%
Cumulative Final Exam (3 hrs)	40%

Please refer to **my website** for tentative *test dates* and *lab due dates*.

All tests must be written during the scheduled times. In the event that you missed a test due to family emergency or illness, the weight of the test will be put on the final exam if the instructor is notified *before* the test and proper documentation is provided. NO late assignments or lab assignments will be accepted for credit. Final examinations will be scheduled by the college and they will take place during April 13-18 and April 20-21. You must be available to write the final examination at the scheduled time. Holidays or scheduled flights are not considered to be emergencies.

6. Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D	Minimum level of achievement for which credit is granted; a course with a "D" grade cannot be used as a prerequisite.	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy E-1.5 at camosun.ca for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that, due to design may require a further enrollment in the same course. No more than two IP grades will be assigned for the same course. (For these courses a final grade will be assigned to either the 3 rd course attempt or at the point of course completion.)
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College calendar, at Student Services, or the College web site at camosun.ca.

STUDENT CONDUCT POLICY

There is a Student Conduct Policy **which includes plagiarism**. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, at Student Services, and the College web site in the Policy Section.

Suggested Problems in the Textbook			
Section	7th Edition Problems	Section	6th Edition Problems
1.1	5, 6, 7, 16, 21, 35, 39	1.1	3, 4, 10, 19, 21, 25, 37
1.2	51, 54, 55, 56, 57, 73, 78, 87	1.2	48, 50, 51, 52, 53, 61, 63, 65, 79, 91
1.3	101, 105, 107, 117, 119, 123, 127, 129, 133, 135, 137, 139, 143, 145	1.3	99, 103, 105, 109, 111, 121, 123, 127, 129, 131, 133, 137, 139
ch1	171, 173, 175	ch1	160, 163, 166
2.1	9, 23, 25, 27, 29, 30, 33, 35, 37	2.1	4, 5, 7, 9, 11, 13, 17, 21, 25
2.2	47, 53, 57, 59	2.2	31, 41, 47, 49
2.3	64, 65, 77, 78, 81, 84, 86	2.3	55, 56, 57, 65, 72, 75, 77
2.4	101, 102, 107, 113,	2.4	85, 87, 93, 103
2.5	117, 119, 120, 125, 127, 132	2.5	107, 109, 110, 111, 113, 121
2.6	135, 137, 139, 141, 143	2.6	123, 125, 127, 129, 131
ch2	166, 169, 173	ch2	147, 153, 159
3.1	1, 3, 11, 17, 27, 31, 39, 47	3.1	1, 3, 11, 17, 23, 27, 37, 47
3.2	50, 54, 55, 67, 69, 75,	3.2	50, 53, 65, 67, 75
3.3	79, 81, 82, 83, 84, 95	3.3	79, 81, 82, 83, 84, 95
ch3	122, 129	ch3	115, 123
4.1	1, 5, 7	4.1	1, 3, 6
4.2	11, 12, 13, 15, 17, 26, 29, 32, 37, 39, 43, 45	4.2	11, 12, 13, 15, 17, 22, 25, 31, 37, 39, 43, 45
4.3	46, 47, 48, 55, 59, 60, 61, 63	4.3	46, 47, 48, 51, 57, 59, 61, 63
4.4	67, 69, 70, 71, 75, 83, 91	4.4	67, 69, 70, 71, 73, 79, 87
4.5	96, 97, 98, 100, 101, 107, 109, 113, 115, 117, 119, 121, 122, 128,	4.5	95, 96, 98, 99, 100, 101, 103, 107, 109, 111, 113, 115, 116, 123
ch4	141	ch4	135
5.1	2, 3, 4, 5, 6, 19, 21, 23, 25	5.2(5.1)	36, 37, 38, 39, 40, 49, 51, 53, 55
5.2	33, 35, 37, 38, 39, 40, 43, 45, 47, 51, 55, 61, 65	5.1(5.2)	1, 3, 5, 6, 7, 8, 11, 13, 15, 19, 23, 27, 31
ch5	75, 77	ch5	69, 71
6.1	1-3, 5-7, 9, 11, 17, 23, 25	6.1	1-3, 5-7, 9, 11, 17, 21, 23
6.2	36-39, 41-43, 45-47, 53, 57, 59, 69, 73, 77	6.2	36-39, 41-43, 45-47, 53, 57, 59, 69, 73, 77
6.3	84, 87, 93	6.3	84, 87, 95
ch6	125, 127	ch6	125, 127
7.1	1, 3, 5, 8, 9, 21, 25, 33, 39	7.1	1, 3, 5, 8, 9, 21, 33, 37, 39
7.2	55, 57, 61, 63, 71, 73, 79, 84, 85	7.2	55, 57, 63, 65, 69, 71, 75, 84, 85
8.1	1, 3, 5, 7, 13, 23, 25, 39	8.1	1, 3, 5, 7, 9, 13, 23, 29
8.2	48-51, 63, 65, 69	8.2	35-38, 45, 49, 53
9.1	1, 2	9.1	1, 2
9.2	5, 6	9.2	3, 4
ch9	27, 35, 41, 49	ch9	7, 21, 25, 41
10.1	1, 2, 7, 9, 37, 39	10.1	1, 2, 7, 9, 39, 41
12.1	1, 5, 9 (don't do b), 11, 15, 31	12.1	1, 5, 11, 15 (don't do b), 17, 27