

Stat 341-001: Introduction to Probability and Statistics (4 credits)

Location and Meeting Times: LA 208; M12:50-1:50, LA 529; TR12:10-1:40

Instructor Information: Don Gayan Wilathgamuwa
 LA 841
 406-657-2920
 don.wilathgamuwa@msubillings.edu

Office Hours: M: 10:30-12:30
 W: 9:00 a.m.-12:00 noon. (LA 841)
 Or by appointment

Text: *Mathematical Statistics with Applications (7th Edition)*
 Dennis Wackerly (Author), William Mendenhall (Author), Richard L. Scheaffer (Author)
 ISBN10: 0-495-11081-7, ISBN13: 978-0-495-11081-1

Goals and Purposes: The primary goals of the course are to teach students to read and write mathematical arguments, solve problems containing a stochastic component, and apply stochastic and statistical concepts to problems in a variety of settings. The successful student will demonstrate an understanding of the basic ideas of probability and statistics and how these ideas are used to solve problems in a variety of disciplines

Prerequisite: M 273 or equivalent

Course Outline: Chapter 1: What is Statistics?
 Chapter 2: Probability
 Chapter 3: Discrete Random Variables and Their Probability Distributions
 Chapter 4: Continuous Variables and Their Probability Distributions
 Chapter 5: Multivariate Probability Distributions
 Chapter 6: Functions of Random Variables
 Chapter 7: Sampling Distributions and the Central Limit Theorem
 Chapter 8: Estimation
 Chapter 10: Hypothesis Testing

Grading Scale:

Assessment:

<u>Percentage</u>	<u>Grade</u>
90-100%	A
80-89%	B
70-79%	C
60-69%	D
Below 60%	F

<u>Item</u>	<u>Percentage</u>
Homework	10 %
Quizzes	20 %
Exam 1 (Midterm)	25 %
Exam 2 (Final)	35 %
<u>Project</u>	<u>10 %</u>
Total	100 %

Quizzes: Refer to the course calendar. There will be no makeup quizzes.

Exams: There will be 2 in class exams: a midterm exam and a final exam. The use of a scientific calculator will be permitted on the exams. The use of books, notes or other resource materials will not be permitted on any exams.

Incomplete: No Incompletes will be given unless requirements as per student handbook are met.

Classroom Etiquette: Maintaining an environment conducive to learning is of the utmost importance. Hence, talking with fellow students is discouraged. Also, please turn off all electronic devices before entering the class.

Attendance: Regular attendance is essential. Attendance will be taken every day.

Important URL s: How to Study Mathematics-written by Paul Dawkins
http://tutorial.math.lamar.edu/pdf/How_To_Study_Math.pdf

Important Dates:

Last Day for Registering/Adding Classes	Friday, January 23
Last Day for Withdrawing/Dropping Classes with a Partial Refund	Wednesday, February 4
Last Day to Drop Classes Without Instructor Permission (No Refund)	Thursday, March 12
Last Day to Drop a Class with Approval of Advisor and Course Instructor	Thursday, April 9

Further Information

1. Some of you will face personal situations during this semester that will rightfully demand more attention than this class, and will not allow you to be mentally in class. Whenever possible, accommodations that are fair to you will be made if I am informed in a timely manner **before deadlines**.
2. For both a student and a teacher there is no substitute for preparation. I expect you to stay current in your readings and other assignments. You should plan on spending time each and every day studying these concepts. Some assignments will require more of your time than others.
3. As college students you should be very familiar with the requirements for academic integrity. Although discussing ideas from the class with others is both productive and encouraged, I expect answers on your exams to be your own independent work. Students who cheat on class assessment work will meet with disciplinary action, including but not limited to a failing grade in the course. For further information, consult the MSU-B student handbook (available online at the MSU-B home page).
4. An Incomplete (grade) is given only when students have been ‘in attendance’ for at least three-fourths of the semester but have been prevented by circumstances beyond their control from completing all the requirements of the course. The student must provide adequate evidence to the instructor as to the reason why they were unable to complete the requirements of the course. An Incomplete must be made up within one calendar year or the grade will revert to an F. In general, to make up an incomplete for this class, the student must retake the course and will be required to submit all material required by the new instructor of a regular student. No extra credit is offered.

5. Students with disabilities, whether physical learning, or psychological, who believe that they may need accommodations in this class, are encouraged to contact Disability Support Services (DSS) as soon as possible to ensure that such accommodations are implemented in a timely fashion. Please meet with DSS staff to verify our eligibility for any classroom accommodations and for academic assistance related to your disability. Disability Support Services is located in the Academic Support Center. The DSS staff can be reached at 406-657-2283 in the Academic Support Center.

Memo from Academic Support Center and Disability Support Services

Students with Disabilities:

MSU Billings is committed to providing equal access. If you anticipate barriers related to the format or requirements of this course, please meet with me so that we can discuss ways to ensure your full participation in the course. If you determine that disability-related accommodations are necessary, please contact Disability Support Services (657-2283; located in Room 135 in the College of Education). We can then plan how best to coordinate your accommodations.

Academic Support Center:

The Academic Support Center of MSU Billings provides tutoring services to support the academic success students. Any MSUB/City College student can utilize the services on either campus. The ASC is staffed with student tutors, professional tutors and instructors who are trained to tutor in a variety of subjects. Tutors are available to assist students with math, writing, reading, anatomy and physiology, and other specialty areas for specific majors. Tutoring services are "free" as they are already paid for as part of your student fees. The ASC hours are as follows:

- **University Campus – Located in the SUB**
Monday through Thursday, 8 a.m.-7 p.m., Friday, 8 a.m.-5 p.m. Friday, and Sunday nights from 6-9 p.m.
- **City College Campus —Located in the Tech Building**
Monday through Thursday, 8 a.m.-6 p.m., and Friday, 8 a.m.-5 p.m.

Tentative calendar for Stat 341-002, Spring 2015

Week		Date	Topic		Week		Date	Topic
1	M				8	M	9-Mar	Ch5
	T					T	10-Mar	Ch5
	R	15-Jan	Ch1			R	12-Mar	Exam1
2	M	19-Jan	No Classes- Martin Luther King day		9	M	16-Mar	Ch6
	T	20-Jan	Ch2, Q1			T	17-Mar	Ch6, Q13
	R	22-Jan	Ch2, Q2			R	19-Mar	Ch6, Q14
3	M	26-Jan	Ch3		10	M	23-Mar	Ch6
	T	27-Jan	Ch3, Q3			T	24-Mar	Ch6, Q15
	R	29-Jan	Ch3, Q4			R	26-Mar	Ch7, Q16
4	M	2-Feb	Ch3		11	M	30-Mar	Ch7
	T	3-Feb	Ch3, Q5			T	31-Apr	Ch8, Q17
	R	5-Feb	Ch3, Q6			R	2-Apr	No Classes- Spring mini break
5	M	9-Feb	Ch4		12	M	6-Apr	Ch8
	T	10-Feb	Ch4, Q7			T	7-Apr	Ch8, Q18
	R	13-Feb	Ch4, Q8			R	9-Apr	Ch8, Q19
6	M	16-Feb	No Classes- Presidents' day		13	M	13-Apr	Ch10
	T	17-Feb	Ch4, Q9			T	14-Apr	Ch10, Q20
	R	19-Feb	Ch4, Q10			R	16-Apr	Ch10, Q21
7	M	23-Feb	Ch5		14	M	20-Apr	Ch10
	T	24-Feb	Ch5, Q11			T	21-Apr	Ch10, Q22
	R	26-Feb	Ch5, Q12			R	23-Apr	Project Presentations
28-Feb to 8-March: Spring Break								

Final Exam: Tuesday 28-Apr-15, 10:00-11:50