

## **Introductory Business Statistics**

STAT 1010.003

Instructor:	Dr. Darin T Kapanjie
Office:	TBD (check Canvas)
Class Hours:	Tuesday/Thursday 3:30 PM – 5:00 PM
Classroom:	350 SHDH (Steinberg Hall – Dietrich Hall)
Office Hours:	Tuesday/Thursday 2:30 PM – 3:30 PM or by appointment
E-mail:	kapanjie@wharton.upenn.edu

Prerequisite: MATH 1070 or MATH 1400 or MATH 1100

**Course Overview:** Data summaries and descriptive statistics; introduction to a statistical computer package; Probability: distributions, expectation, variance, covariance, portfolios, central limit theorem; statistical inference of univariate data; Statistical inference for bivariate data: inference for intrinsically linear simple regression models. This course will have a business focus but is not inappropriate for students in the college.

- **Textbook:** *Statistics for Business: Decision Making and Analysis* 3<sup>rd</sup> Edition by Stine and Foster We will be using a digital version; please do not purchase the book before our first class.
- **JMP/Excel:** JMP and Excel will be used throughout this course. You will be asked to bring your laptop to class to participate in classroom activities. (No calculator is required for this course; JMP/Excel will be used as your "calculator").

Course Site: canvas.upenn.edu

Final Grade: will be based on the weighted average of

Homework	10%
In-class Activities/Quizzes	5%
Exams (three)	60%
Final Exam	25%

**Homework (10%):** Homework assignments will be dispersed each week. You will have three attempts to successfully complete each online homework question and one submission for traditional homework assignments. If you get an online homework question incorrect, click on Similar Exercise to get a new problem. Most homework assignments will be due at 11:59 p.m. on the Monday after it was assigned (see course schedule).

**In-class Activities/Quizzes (5%):** Class activities/quizzes will be assigned during each live class. The activities may be short quizzes, individual or group assignments. Each class activity will be graded, and you must be in class to access these quizzes/assignments. Your three lowest class activities will be dropped.

**Exams (60%):** There will be three exams in this course. Each exam will be administered in class (see course schedule). There will be multiple versions of each exam. If you miss an exam, you will receive a zero.

Final Exam (25%): A comprehensive final exam will be administered during our scheduled final exam time.



Grading Scale:		100 – 93 A	92 – 90 A–
	89 – 87 B+	86 – 83 B	82 – 80 B–
	79 – 77 C+	76 – 73 C	72 – 70 C–
	69 – 67 D+	66 – 63 D	62 – 60 D–
		59–0 F	
All final course grades will be rounded to the nearest whole number			
(i.e. 69.5 rounds to 70, but a 69.49 rounds to 69).			

**Code of Academic Integrity**: Academic Dishonesty is a serious offense and will not be tolerated. Activities that have the effect or intention of interfering with education, pursuit of knowledge, or fair evaluation of a student's performance are strictly prohibited. Any student caught breaking the Code of Academic Integrity will be subject to University disciplinary action. See <u>Pennbook</u> for details. *Leges Sine Moribus Vanae* 

Late Assignment Policy: No late assignments will be accepted.

Extra Credit Policy: No extra credit opportunities will be provided.

**Attendance**: Attendance is considered mandatory. It is important for you to attend all live classes and be on time. There's no such thing as an excused or unexcused absence, only present or absent. If you are not in class, then you will not have the opportunity to submit the daily In-class Activities/Quizzes (see above) and receive a zero for that day's assignments.

**Pearson MyLab Statistics:** MyLab Statistics is the tool we will use for most of your online homework. The eBook is also available in this system. Therefore, you must register for the product regardless if you purchased a hard copy of the text. Online access, which includes access to the homework assignments and the eBook, must be purchased before 11:59 p.m. on Friday 1/20. If you register late and miss assignments, you will receive a zero for those missed assignments.

## **Disability Statement:**

The University of Pennsylvania provides reasonable accommodations to students with disabilities who have self-identified and received approval from the Office of Student Disabilities Services (SDS). If SDS has approved your request for accommodations, please make an appointment to meet with me as soon as possible to discuss the arrangements for your accommodations.

If you have not yet contacted Student Disabilities Services, and would like to request accommodations or have questions, you can make an appointment by calling 215.573.9235.

The office is located in the Weingarten Learning Resources Center at Stouffer Commons, 3702 Spruce Street, Suite 300.

Please visit the SDS website at <u>https://weingartencenter.universitylife.upenn.edu/disability-services/</u> for more information. SDS services are free and confidential.



## **Course Schedule**

## \*Subject to Change – please refer to our Canvas course for updates

Week	Activities/Assignments	Date
Week 1	Attend Class: Course & Technology Overview	
	In-class Quiz/Activity	Thursday, 1/12
	Register: MyLab Statistics	
	Attend Class: Ch 1: Introduction Ch 2: Data In-class Quiz/Activity	Tuesday, 1/17
Week 2	Attend Class: Ch 3: Describing Categorical Data Ch 4: Describing Numerical Data In-class Quiz/Activity	Thursday, 1/19
	Complete: Homework Ch 1 & Ch 2 Complete: Homework Ch 3 & Ch 4	<b>Due</b> : Monday, 1/23 @ 11:59 p.m.



Week 3	Attend Class: Empirical Rule & Examples In-class Quiz/Activity	Tuesday, 1/24
	Attend Class: Ch 5: Association between Categorical Variables	Thursday, 1/26
	In-class Quiz/Activity	
	<b>Complete:</b> Homework Empirical Rule <b>Complete:</b> Homework Ch 5	<b>Due</b> : Monday, 1/30 @ 11:59 p.m.
	Attend Class: Ch 6: Association between Quantitative Variables (pt 1)	Tuesday, 1/31
	In-class Quiz/Activity	
Week 4	Attend Class: Ch 6: Association between Quantitative Variables (pt 2)	Thursday, 2/2
	In-class Quiz/Activity	
	<b>Complete:</b> Homework Ch 6 pt 1 <b>Complete:</b> Homework Ch 6 pt 2	<b>Due:</b> Monday, 2/6 @ 11:59 PM
	ATTEND CLASS: Exam I: Chapters 1 – 6	Tuesday, 2/7
	Watch: (asynchronous day) Ch 7: Probability	Thursday, 2/9
	Complete: Ch 7 Classwork	
	Complete: Homework Ch 7	Due: Monday, 2/13 @ 11:59 PM



Week 6	Attend Class: Ch 8: Conditional Probability (pt 1) In-class Quiz/Activity	Tuesday, 2/14
	Attend Class: Ch 8: Conditional Probability (pt 2)	Thursday, 2/16
	In-class Quiz/Activity	
	Complete: Homework Ch 8 pt 1 Complete: Homework Ch 8 pt 2	<b>Due:</b> Monday, 2/20 @ 11:59 PM
	Attend Class: Ch 9: Random Variables (pt 1)	Tuesday, 2/21
	In-class Quiz/Activity	
Week 7	Attend Class: Ch 9: Random Variables (pt 2)	Thursday, 2/23
	In-class Quiz/Activity	
-	Complete: Homework Ch 9 pt 1	<b>Due:</b> Monday, 2/27 @ 11:59 PM
	Complete: Homework Ch 9 pt 2	
Week 8	Attend Class: Ch 10: Association between Random Variables	Tuesday, 2/28
	In-class Quiz/Activity	
	Attend Class: Ch 11: Probability Models for Counts (Binomial & Poisson)	Thursday, 3/2
	In-class Quiz/Activity	
	Complete: Homework Ch 10	
	Complete: Homework Ch 11	* <b>Due:</b> Friday, 3/3 @ 11:59 PM



Week 9	Spring Break – NO Classes	3/4 – 3/12
	<b>Attend Class:</b> Ch 12: The Normal Probability Model	Tuesday, 3/14
Week 10	In-class Quiz/Activity	
	ATTEND CLASS: Exam II: Chapters 7 – 12	Thursday, 3/16
	Complete: Homework Ch 12	*Due: Thursday, 3/16 @ 11:59 PM
	Attend Class: Ch 13: Samples and Surveys	Tuesday, 3/21
	In-class Quiz/Activity	
Week 11	<b>Attend Class:</b> Ch 14: Sampling Variation and Quality	Thursday, 3/23
	In-class Quiz/Activity	
	Complete: Homework Ch 13 Complete: Homework Ch 14	Due: Monday, 3/27 @ 11:59 PM
Week 12	Attend Class: Ch 15: Confidence Intervals (pt 1)	Tuesday, 3/28
	In-class Quiz/Activity	
	Attend Class: Ch 15: Confidence Intervals (pt 2)	Thursday, 3/30
	In-class Quiz/Activity	
	Complete: Homework Ch 15 pt 1	
	Complete: Homework Ch 15 pt 2	<b>Due:</b> Monday, 4/3 @ 11:59 PM



	Watch: Asynchronous Day Ch 16: Statistical Tests (pt 1) Complete: Ch 16 pt 1 Classwork	Tuesday, 4/4	
Week 13	Watch: Asynchronous Day Ch 16: Statistical Tests (pt 2)	Thursday, 4/6	
	Complete: Ch 16 pt 2 Classwork		
	Complete: Homework Ch 16 pt 1	<b>Due:</b> Monday, 4/10 @ 11:59 PM	
	Complete: Homework Ch 16 pt 2		
	Watch: Asynchronous Day Ch 17: Comparison (Two-Sample Tests pt 1)	Tuesday, 4/11	
	Complete: Ch 17 pt 1 Classwork		
Week 14	<b>Attend Class:</b> Ch 17: Comparison (Two-Sample Tests pt 2)	_ Thursday. 4/13	
	In-class Quiz/Activity		
	Complete: Homework Ch 17 pt 1	<b>Due:</b> Monday, 4/17 @ 11:59 PM	
	Complete: Homework Ch 17 pt 2	,	
	ATTEND CLASS: Exam III: Chapters 13 – 17	Tuesday, 4/18	
Week 15	<b>Attend Class:</b> Ch 19: Linear Patterns (Simple Linear Regression)	Thursday, 4/20	
	In-class Quiz/Activity		
	Complete: Homework Ch 19	Due: Monday, 4/24 @ 11:59 PM	
Week 16	Attend Class: Review for Final Exam	Tuesday, 4/25	
Finals Week	ATTEND FINAL EXAM: Stat 1010 Comprehensive Final Exam (Date and Time TBD)		