LIU – POST

MTH 19 **Basic Statistics, Spring 2018** 3 credits

Classes §1: Tu; 5:00–7:40; PH 202 | §2: Tu, Th; 11:00–12:20; PH 202.

Website `http://arvind-borde.org/courses/math19/`

Instructor Arvind Borde | `arvind.borde@liu.edu` | `http://arvind-borde.org/`

Office LS 239; telephone: (516) 299 2447. Hours: T, Th, 12:30–2:00 pm, or by appointment.

Bulletin This course is directed toward understanding and interpreting numerical data. Topics covered include: descriptive statistics, regression, correlation, sampling techniques and elements of inferential statistics.

Text, etc. *Fundamentals of Statistics*, Fifth Edition. Michael Sullivan. Publisher: Pearson (2017). Dedicated calculator with STAT mode.

Rules **Do:** attend all classes, come on time, stay for the duration, pay attention.
Don't: talk among yourselves, be disruptive, text, have your cell phone out.
Violating any of these counts as an absence and will lead to further disciplinary action. Three or more violations will lead to an automatic F. You may use a computer or tablet to take notes, but must be prepared to show your notes and sit in the first row if asked.

Homework & Tests Weekly homework is on the website. You must attempt it the day it is assigned. If you have difficulties, see me or a tutor *that week itself*. HW will be discussed in the class immediately following. Specific questions will be answered in class, but not general ones about the whole assignment. You must have the homework available in a separate notebook or folder, with your name on each assignment, or clearly marked as such in the class notebook. You must bring the homework and class notebook with you if you want extra help in my office. It is your responsibility to catch up on material you miss for any reason. You should expect to spend 6 hours a week on this course outside class.

You may use one 3×5 index card (both sides) on tests and must submit it if asked at any point. Tests will be based mainly on material and homework covered since the previous test, but familiarity with all material covered up to that point is expected. You will need a dedicated calculator (not cell phone or tablet computer) on all tests. *There are no make-up tests. If you miss a test for any reason you will get a score of* -1 *on it.* You must keep all your tests through the term.

Grades First see the rules above. There will be 6 tests. Your 5 best scores will each count 20% toward your grade. There will be a grade boost if you have done all the homework over the term.

Note Last day to drop: February 2. Last day to withdraw: April 6.

I have understood the syllabus, course requirements, grading method, and rules, and agree to abide by them. I have retained a copy of this syllabus for my records. I have filled out the form overleaf.

Signature: _____ Date: _____

Name: _____

Name (print clearly):

Course section (either number or meeting time):

Major:

Last math class taken (what, when, where):

Career goals:

Dream goals (If earning money were not an issue what would your perfect life be like?):

Math weaknesses (if any):

Math strengths:

Anything in particular that you wish to learn in this course:

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PLEASE PLACE THIS COPY AT THE FRONT OF YOUR NOTEBOOK/FOLDER
YOU MUST HAVE IT WITH YOU IN EVERY CLASS

MTH 19.001/19.002

LIU – POST
Basic Statistics
Arvind Borde (arvind.borde@liu.edu)

Spring 2018

Week 1 *Tuesday, January 23*
Ch. 1: **Introduction.**
Review of basic mathematics.

Week 2 *Tuesday, January 30*
Ch. 2: **Organizing data**

Week 3 *Tuesday, February 6*
Ch. 3: **Summarizing data**
Central tendency and dispersion

Test 1: Chapters 1 & 2 — score — %

Week 4 *Tuesday, February 13*
Ch. 3: **Summarizing data**
Position, outliers, 5-number summary

Week 5 *Tuesday, February 20*
Ch. 4: **Relationships**
Scatter diagrams and correlation

Test 2: Chapter 3 — score — %

Week 6 *Tuesday, February 27*
Ch. 4: **Relationships**
Least squares regression

Week 7 *Tuesday, March 6*
Ch. 5: **Probability**
Basic probability ideas

Test 3: Chapter 4 — score — %

Spring Break

Week 8 *Tuesday, March 20*
Ch. 6: **Discrete probability distributions**

Week 9 *Tuesday, March 27*
Ch. 7: **The normal probability distribution**

Test 4: Chapters 5 & 6 — score — %

Week 10 *Tuesday, April 3*
Ch. 8: **Sampling distributions**

Week 11 *Tuesday, April 10*
Ch. 9: **Estimating values**

Test 5: Chapters 7 & 8 — score — %

Week 12 *Tuesday, April 17*
Ch. 10: **Hypothesis tests; Course review**

Week 13 *Tuesday, April 24*

Test 6: Chapters 9 & 10 — score — %

Final: TBA

Letter Grade Key

%:	50–64	65–71	72–77	78–79	80–83	84–87	88–89	90–93	94+
Grade:	D	C^-	C	C^+	B^-	B	B^+	A^-	A