

MATH 111-01: STATISTICS II (3 CREDITS) Summer II 2017 SYLLABUS

INSTRUCTOR INFORMATION

Instructor: Michael Kovarik

Office: TBD

Telephone: 908 763 2900 (use SMS) E-Mail: G00213162@raritanval.edu

Office Hours: TBD

Website: mkovarik.me/math111/

CLASS TIME AND LOCATION

Mon - Thurs 8:30 - 10:15 S244

PREREQUISITE

The prerequisite for this course is:

- Successful completion of MATH 110 Statistics I With a "C" or better, or
- Score of 3 or higher on the AP Statistics Exam

If you have not fulfilled the requirements or you are unsure if you do, please talk to me so that you may be placed in the appropriate math course.

REQUIRED MATERIAL

Textbook: Introductory Statistics, 10th edition, N. A. Weiss, packaged with MyStatLab OR

MyStatLab standalone which includes the eBook. A hard copy of the book is not needed

if you are comfortable with the eBook included in MyStatLab.

Calculator: A scientific calculator is needed. Graphing calculators are permitted but not required.

MATERIAL TO BE COVERED

| Chapter 8 Confidence Intervals for One Population Mean (review): | Sections $1-3$ |
|---|------------------------|
| Chapter 9 Hypothesis Tests for One Population Mean (review except 9.4): | Sections $1-6$ |
| Chapter 10 Inferences for Two Population Means: | Sections $1 - 3$, 5 |
| Chapter 12 Inferences for Population Proportions: | Sections $1 - 3$ |
| Chapter 13 Chi –Square Procedures | Sections $1-4$ |
| Chapter 14 Descriptive Methods in Regression and Correlation: | Sections $1-4$ |
| Chapter 15 Inferential Methods in Regression and Correlation: | Sections $1-4$ |
| Chapter 16 Analysis of Variance ANOVA: | Sections $1-4$ |

COURSE DESCRIPTION

This course is a continuation of Statistics I. Topics include description and analysis of bivariate data, regression and correlation, inferences in regression, chi-square procedures, inferences in two means and proportions, simple experimental design, analysis of variance, and optional non-parametric tests.

Learning Outcomes: Students will be able to:

- 1. Conduct an appropriate hypothesis test using both classical and modern (p-value) procedures.
- 2. Interpret results from inferential statistics to interpret data for the purposes of decision—making for comparing two population means.
- 3. Interpret results from inferential statistics to interpret data for the purposes of decision—making for comparing one or two population proportions.
- 4. Interpret results from inferential statistics to interpret data for the purposes of decision—making in Chi-Square tests for independence or goodness-of fit.
- 5. Interpret results from inferential statistics to interpret data for the purposes of decision-making for a one-way ANOVA analysis.
- 6. Use linear regression techniques for purposes of analysis and prediction for slope or correlation.

ATTENDENCE AND WITHDRAWAL POLICY

All students are expected to attend all classes. Regular attendance is essential for success in the course. If you miss more than one-fifth of the class meetings, you may be asked to withdraw from the course. *In all cases, the responsibility for withdrawing from the course is the individual student's.* Failure to withdraw may result in an "F" grade for the course. Those who simply stop attending the class may receive an "F" grade for the course.

STUDENTS WITH DOCUMENTED LEARNING DISABILITIES

Reasonable Accommodation: Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course MUST provide documentation of accommodations from the RVCC office of Disability Services, C143. No accommodations will be made without this documentation. For additional information, go to the Disabilities Services website at http://www.raritanval.edu/studentserv/counseling/index.html

VIOLATIONS OF ACADEMIC INTEGRITY

Violations of academic integrity of any type will not be condoned. This includes giving/receiving help on tests, using calculators on tests when not permitted, and copying another student's work. Violators will be reported to the Dean of Academic and Student Services.

VISITING STUDENTS

In order to transfer credit back to your home four-year institution, you will need to request RVCC to send a transcript to the school at the conclusion of your last summer class. Students should allow approximately five business days for a request to process.

GRADING SYSTEM

Your grade is based on successful completion of homework, quizzes, labs, online forums, and tests

Summary:

| Homework | 10% |
|---------------|------|
| Quizzes/Other | 30% |
| Tests | 30 % |
| Final Exam | 30 % |

| Grading Scale: | 90 - 100% | A | 76 – 79% | C+ |
|-----------------------|-----------|----|----------|----|
| | 86 - 89% | B+ | 70 - 75% | C |
| | 80 - 85% | В | 60 - 69% | D |
| | | | 0 - 59% | F |

The grading scale is subject to change. If so, it will be in your favor.

Tests: Two tests are currently scheduled (this is subject to change). Missing a test due to absence results in a grade of zero for that test. Opportunities for make up tests may be provided (subject to change).

Homework: Homework will be assigned daily. Homework is graded on completeness and not correctness. You may work with other students, but only report solutions that you fully understand and are willing to explain. Homework will be submitted in class.

Quizzes: Quizzes (announced and unannounced) will typically be administered at the beginning of class. Expect a quiz at most class days. Missing a quiz due to absence will result in a grade of zero for that quiz. The lowest few grades may be dropped (subject to change).

Final Exam: The final examination is cumulative and will be worth 30% of the total grade. **NO MAKE-UP final exam will be given unless there is a written documentation such as doctor's note, parole report, court appearance, accident report, bereavement notice, etc., explaining the absence.**

GETTING HELP *Get help early before it's too late!* Here are some ways of getting help:

Office Hours. The purpose of office hours is to provide time for me to help and interact with you. If my office hours are not convenient for you, set up an appointment with me.

Classmates. Students are encouraged to form study groups. You can easily contact each other via Lion's Den or exchange each other's contact information in person.

Academic Support Center (ASC). RVCC provides its students with math tutors, as well as tutors in other disciplines, free of charge, in the ASC located in S-020 on the basement floor of Somerset Hall. The textbook's student solution manual and video lectures are available by request. To find out more, visit the ASC or call (908) 526-1200 x 8393.

Textbook Supplements. In addition to your textbook, there are supplemental resources:

- CD Lecture Series Lessons corresponds to textbook topics.
- Solution manual Provides step-by-step solutions for all the textbook's Check Points, Chapter Review Exercises, and Chapter Tests. It also provides step-by-step solutions to the odd-numbered exercises for each section.
- MyStatLab www.coursecompass.com: Provides online practice exercises, tutorial, solutions to textbook exercises, lecture series, multimedia textbook. I will provide you a

handout that gives you instructions on how to register for MyStatLab.com. You will need a Student Access Code (provided with your textbook) and a Course ID. If your book did not come with MyStatLab, you will need to purchase a stand-alone kit in the RVCC bookstore or go to http://www.mymathlab.com/enrolling.html and click on "purchase online access" where you will be asked for the Course ID.

MATH 111 STATISTICS II

Summer II 2017 **SCHEDULE** (tentative)

| DATE | TOPICS | | | |
|-------------|---|--|--|--|
| | (Sections are from Introductory Statistics) | | | |
| Week 1 | 7/10: sections 8.1, 8.2 | | | |
| 7/10 - 7/13 | 7/11: 9.1, 9.2, 9.3, 9.4 | | | |
| | 7/12: 8.3, 9.5 | | | |
| | 7/13: 9.7 | | | |
| Week 2 | 7/17: 10.1, 10.2, 10.3 | | | |
| 7/17-7/20 | 7/18: 10.5, 16.1 | | | |
| | 7/19: 16.2, 16.3 | | | |
| | 7/20: 16.4, | | | |
| | 7/24: Test 1 review | | | |
| | 7/25: TEST 1 | | | |
| Week 3 | 7/26: 12.1, 12.2 | | | |
| 7/24-7/27 | 7/27: 12.3 | | | |
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| Week 4 | 7/31: 13.1, 13.2 | | | |
| 7/31 - 8/03 | 8/01: 13.3, 13.4 | | | |
| | 8/02: 14.1, 14.2, 14.3 | | | |
| | 8/03: 15.1, 15.2, 15.3 | | | |
| Week 5 | 8/07: 14.4, 15.4 | | | |
| WEEK 3 | 8/08: Test 2 review | | | |
| | 8/09: TEST 2 | | | |
| | 8/10: TBD | | | |
| | 0/10. 1DD | | | |
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| Week 6 | 8/14: TBD | | | |
| | 8/15: TBD | | | |
| 8/14 - 8/17 | 8/16: TBD | | | |
| | 8/17: FINAL EXAM. | | | |
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