



## DEPARTMENT OF SCIENCE

### COURSE OUTLINE – ST1510 A3 INTRODUCTION TO APPLIED STATISTICS WINTER 2013

**INSTRUCTOR:** Dr. Brian Redmond, Ph.D. **PHONE:** (780) 539-2093  
**OFFICE:** J206 **E-MAIL:** bredmond@gprc.ab.ca

**OFFICE HOURS:** M W F 10:00AM-11:00AM

**PREREQUISITE(S)/COREQUISITE:** Mathematics 30-2 or Pure Math 30 or equivalent

**REQUIRED TEXTS:** The Basic Practice of Statistics 6<sup>th</sup> Ed. by Moore/Notz/Fligner

**CALENDAR DESCRIPTION:** This course includes data collection and presentation, descriptive statistics, probability distributions, sampling distributions, and the central limit theorem, point estimation and hypothesis testing, correlation and regression analysis, goodness of fit and contingency tables.

**CREDIT/CONTACT HOURS:** (3-0-2) 3 credits

**DELIVERY MODE(S):** Lectures: A3 T R 8:30-9:50 J226  
Lab\*: AL1 T 2:30-4:20 J101  
Lab\*: AL2 M 2:30-4:20 A305  
*\*All labs will start in the week of Jan. 14-18*

**OBJECTIVES:** To demonstrate the basic knowledge of descriptive statistics and its use. To be able to perform elementary analysis of research data and to interpret the results of statistical tests. To demonstrate a conceptual knowledge of the concepts and principles involved. To select the appropriate statistical test. To be able to enter and analyze data using the computer program EXCEL.

**TRANSFERABILITY:** See [www.gprc.ab.ca](http://www.gprc.ab.ca) and [www.acat.gov.ab.ca](http://www.acat.gov.ab.ca)

**\*\* Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions and may not meet the prerequisite requirements for other math courses. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

**GRADING CRITERIA:**

| GRANDE PRAIRIE REGIONAL COLLEGE |                    |                       |                                     |
|---------------------------------|--------------------|-----------------------|-------------------------------------|
| GRADING CONVERSION CHART        |                    |                       |                                     |
| Alpha Grade                     | 4-point Equivalent | Percentage Guidelines | Designation                         |
| A <sup>+</sup>                  | 4.0                | 95 – 100              | EXCELLENT                           |
| A                               | 4.0                | 90 – 94               |                                     |
| A <sup>-</sup>                  | 3.7                | 85 – 89               | FIRST CLASS STANDING                |
| B <sup>+</sup>                  | 3.3                | 80 – 84               |                                     |
| B                               | 3.0                | 75 – 79               | GOOD                                |
| B <sup>-</sup>                  | 2.7                | 70 – 74               |                                     |
| C <sup>+</sup>                  | 2.3                | 66 – 69               | SATISFACTORY                        |
| C                               | 2.0                | 63 – 65               |                                     |
| C <sup>-</sup>                  | 1.7                | 60 – 62               |                                     |
| D <sup>+</sup>                  | 1.3                | 55 – 59               | MINIMAL PASS                        |
| D                               | 1.0                | 50 – 54               |                                     |
| F                               | 0.0                | 0 – 49                | FAIL                                |
| WF                              | 0.0                | 0                     | FAIL, withdrawal after the deadline |

|                     |             |  |
|---------------------|-------------|--|
| <b>EVALUATIONS:</b> | Assignments | 12%  |
|                     | Lab Reports | 10%  |
|                     | Midterm     | 25% (week of Feb. 11-15)                                     |
|                     | Lab Exam    | 15% TBA  |
|                     | Final Exam  | 38% April 18-29 inclusive (including Saturdays and evenings) |

**STUDENT RESPONSIBILITIES:** Students are responsible for all lecture material, labs and readings.

Students are expected to practice the material by doing problems from the textbook. Assignments are not accepted if handed in late. If the midterm is missed due to illness the weight will be put on the final (i.e. the final will be worth 60%). If the final is missed due to illness it will be deferred (see calendar for information). A doctor's note and a phone message or email will be required in both cases.

**STATEMENT ON PLAGIARISM AND CHEATING:** Refer to the Student Conduct section of the College Admission Guide at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at [www.gprc.ab.ca/about/administration/policies/\\*\\*](http://www.gprc.ab.ca/about/administration/policies/**)

**\*\*Note:** all Academic and Administrative policies are available on the same page.

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|-------------------------|----------|--|----------------|
| <b>COURSE SCHEDULE:</b> | Part I   | Exploring Data                             | Chapters 1-7   |
|                         | Part II  | From Exploration to Inference, Probability | Chapters 8-17  |
|                         | Part III | Inference about variables                  | Chapters 18-22 |
|                         | Part IV  | Inference about Relationships              | Chapters 23-25 |