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| **School Year** | 2014-2015 | **Teacher Name** | Jennifer Braun Paliszewski |
| **Room/Office** | room 230 | **Website** | braunpaliszewski@weebly.com |
| **Phone** | 720-972-4444 ext 2664 | **Blog** | N/A |
| **Email Address** |  Jennifer.Braun@adams12.org |
| **PBL Title** | TBD | **Panel Date** | TBD |

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| **Course Name** | **AP Probability and Statistics** |
| **Course Description** | The study of statistics blends the rigor, calculations, and deductive thinking of mathematics, the real-world examples and problems of the social sciences, the decision-making needs of business and medicine, and the laboratory method and experimental procedures of the natural sciences. These multi-disciplinary aspects and applications of statistics are what eventually will make it the most rewarding of the courses you take. |
| **Course Text** | Bock, David E., Paul F. Velleman and Richard D. DeVeaux. *Stats: Modeling the World.* 3rd edition; Boston: Pearson/Addison-Wesley, 2010. |
| **Unit of Study** | **Grade Level Expectations/Content Standards** | **Approximate Time Spent or Percent of time Spent** | **Targeted Date of Assessment(s)** |
| Part IExploring and Understanding Data | * Construct and interpret graphical displays of distributions of univariate data.
* Summarize and compare distributions of univariate data.
* Analyze categorical data.
* Investigate the normal distribution.
 | 10% | 8/31/129/7/12 |
| Part IIExploring Relationships Between Variables | * Analyze bivariate data through correlation, least squares regression and residual plots.
 | 10% | 8/14/1210/4/12 |
| Part IIIGathering Data | * Understand methods of data collection.
* Plan how to conduct a survey
* Plan how to conduct an experiment.
* Generalize results and draw conclusions.
 | 20% | 11/9/12 |
| Part IVRandomness and Probability | * Explore random phenomena using probability and simulation.
* Combine independent random variables.
 | 15% | 12/7/12 |
| Part VFrom the Data at Hand to the World at Large | * Investigate sampling distributions.
* Estimate population parameters and apply inference.
* Apply tests of significance.
 | 15% | 2/1/13 |
| Part VILearning About the World | * Estimate population parameters and apply statistical inference.
* Apply tests of significance.
 | 15% | 3/1/13 |
| Part VIIInference When Variables Are Related | * Estimate population parameters and apply statistical inference.
* Estimate population parameters.
* Apply tests of logic.
 | 15% | 3/15/134/5/13 |

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| **Grading Scale** | **Grade Percentages/Weights** |
| **A** | 90-100 | **Multiple Choice Summative Assessments**  | **45%** |
| **B** | 80-89 | **Free Response Summative Assessments** | **45%** |
| **C** | 70-79 | **Formative Assessments & Projects** | **10%** |
| **D** | 60-69 | **\*Weekly progress grades are posted at** [**https://ic.adams12.org/campus/portal/adams12.isp**](https://ic.adams12.org/campus/portal/adams12.isp) |
| **F** | 59 or below |

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| **Expected Calculator Skill Outcomes** |
| * Create graphical summaries of data including histograms, scatterplots, boxplots and normal probability plots.
* Create numerical summaries of 1 variable data including mean, standard deviation and 5 number summaries.
* Create numerical summaries of 2 variable data including regression analysis and correlation.
* Use the random number generation tools to simulate a situation.
* Use table tools to set up and manipulate data for various calculations.
* Use the normal, binomial and geometric distribution calculations including cdf and pdf.
* Calculate various significance tests and confidence intervals including proportions, means, and chi square tests.
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| **General Expectations** |
| * Grades are based upon the demonstration of proficiency on units associated with a standard given during each formative or summative assessment. Formative grades in addition to summative unit assessments will be used to holistically determine your grade.
* **Summative: 90%** Summative measures of achievement are taken when unit master is expected. (i.e., unit tests, culmination of a project, embedded assessments, etc.)
* **Formative: 10%** Formative assessments measure the scaffolding skills and/or content embedded in the unit. Formative assessments are taken frequently, after a student has practiced a skill or become familiar with content. Examples of formative assessments include but are not limited to exit tickets, paragraphs, oral check for understanding, warm-ups, stages in a large project, etc.
* Assessments will be graded based on teacher/district/state rubrics.
* On group projects, students will receive a grade for individual work and a group grade.
* Grades are based on achievement of Content Standards and Grade Level Expectations.
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| A**P Preparedness Expectations** |
| **Mock Exam Participation*** A mock exam will be given in the spring that will be graded by a team of AP Stats teachers. The intent of this exam is to have a similar testing environment as the AP exam and to give accurate feedback on content that needs to be reviewed before the actual exam is given.
* The expectation is that **ALL** students take this – during the time frame provided by the school and the Colorado Legacy Grant. A formative grade will be given for attendance and participation in the mock exam.

**Structured Tutorials & Help Sessions*** Under the Colorado Legacy Grant students will be provided with many opportunities for additional learning and review of important concepts. There will be 3 Saturday sessions in the spring and at least 1 hour per week provided by the instructor during each week of school. Attendance at these sessions has been linked to success on the exam. Students are expected to attend at least 10 hours of these additional sessions. A formative score will be given to reflect attendance and participation in these sessions.
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| **Class Expectations** |
| **Additional Help:** * I will be available in room 230 during lunch most days to give extra help. Please let me know if you plan on stopping by. If those times do not work, please set an appointment.

**Materials and Supplies Needed Daily*** Paper, Pencil , Textbook, TI83 or 84 or TI-nspire (will be provided during class if student doesn’t have one)

**Accommodations*** A variety of teaching techniques are used to meet the diverse needs of students. I am available by phone or appointment to discuss concerns or needs of students with special needs.

**Assessments Used To Evaluate Student Progress*** Assignments, Investigations, Observations, Participation, Quizzes, and Tests

**Motivation Used*** A variety of hands-on techniques, investigations, real-world contexts and group work that engage and stimulate students to think about math are a part of this curriculum.
* Students are encouraged to be engaged and motivated in the completion of their assignments.

**Make Up Work*** Make-up work will be provided upon request for a student who has been absent, if the absence is excused. It is the responsibility of the student or parent to request and arrange to obtain make-up work no later than the second school day after returning to class or school from the absence.
* Students shall be given at least the same number of days they were absent plus one additional day to make up assignments. The make-up period begins on the next school day following the absence(s).
* Students are eligible to receive full credit for make-up work completed and submitted by dates and times established in this policy or as may otherwise be arranged with the teacher and/or administrator. Credit may be denied for make-up work completed after the designated deadline. Credit may be reduced for in-class or group activities missed, such as labs, presentations, or assessments which are not readily able to be completed with comparable make-up assignments and/or without the validity of the assignment being compromised.
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| **Student Behavior Expectations** |
|  I expect students to be engaged in the class during the period, this would include no personal music devices or use of cell phones. Students should come to class ready to participate with a good attitude and respectful behavior. If there are issues, I will start with a warning then move to a student conference, parent phone call, detention, or the involvement of student relations. This would depend upon severity and consistency of the behavior. |

Colorado Legacy Schools

Region 1 (Denver): 2014-2015



**CONGRATULATIONS! Your student has enrolled in Colorado Legacy Schools Advanced Placement in affiliation with the National Math & Science Initiative. The AP program prepares students for college-level work and students can potentially earn college credit. Students who successfully complete an AP course are three times more likely to graduate college within 5 years. Through this grant, students will receive increased levels of support such as Saturday Study Sessions, a mock exam, test fee assistance, structured tutorials, and financial incentives.**

**INCENTIVES**

Students will earn $100 for every score of 3, 4, or 5 on math, science, and English AP exams. Additionally, qualifying scores of 3, 4, and 5 can earn students college credit.

**SATURDAY STUDY SESSIONS**

These 4.5-hour review sessions are conducted by content specialists to help prepare students for the AP exam. Students who attend all of these sessions have the **greatest chance** of earning a 3, 4, or 5 on the exam and earning college credit. Breakfast is provided! Dates will be announced as soon as we know them.

**MOCK EXAM**

The best preparation for any AP exam is PRACTICE. This full-length practice exam is a critical component to your student’s success. The date will be announced soon.