FORM 400

CURRICULUM PROPOSAL

Fern Ridge School District 28J

1. Name of Course or Activity College Now Statistics (LCC MTH 243Z)

   School Elmira High School Department Math

2. Check One: ____ Change in old course X New Course

3. Implementation Dates: Begin 09/2025 End ongoing (if short term)

4. Target Group: Junior/Seniors

5. Course Description: Attach the completed "Planned Course Statement".

6. Rationale: (What problem or need will this proposal resolve? How will this goals be accomplished? Use additional pages if necessary.)

Students applying to colleges reported that both statistics and calculus are respected during the application. However, students entering medical and business fields reported statistics being the preferred class by college counselors.

7. Budget Estimate:

	Amount	Explanation
Personnel		no additional FTE needed
Supplies		
Equipment		attend college now training
Travel		
Other		through Lane ESD.
Total:		

Initiator(s) Cydney Vanderveer Position Principal

School Elmira High School Date 07/14/2025

FORM 401

SIGNATURES REQUIRED FOR A PROPOSED CHANGE IN THE CURRICULUM

Fern Ridge School District

PROPOSAL IDENTIFICATION: Statistics- College Now

INITIATOR: Cydney Vandercar

1. Submitted to: Emmy Ervin (Curriculum Associate) Date: 7/14/25
   Signature: Emmy Ervin Date:
2. Submitted to: Cydney Vandercar (Supervising Administrator) Date: 07/14/2025
   Signature: Cydney Vandercar Date: 07/14/2025
3. Submitted to: _____ (Curriculum Council Chairperson) Date: _____

Recommendations of the Curriculum Council: The math department would like to offer this course to support students who want to extend their math knowledge but don't need calculus for their career goals.
Signature: Cydney Vandercar Date: 07/14/2025

4. Submitted to: Gary Carpenter (Superintendent)

Final action taken:
✓ Implementation as submitted is authorized (Assuming Board Approval)
_____ Implementation with specified modification is authorized
_____ Implementation is not authorized

Explanation: _____

Signature: _____ Date: 7-15-25

General Education Requirements: Statistics MTH 243Z

Credit: Math 4 college credits if dual enrolled

Course Learning Outcomes

Upon successful completion of this course, the student will be able to:
1. Critically read, interpret, report, and communicate the results of a statistical study along with evaluating assumptions, potential for bias, scope, and limitations of statistical inference
a. Classify study designs and variable types and identify methods of summary and analysis
2. Produce and interpret summaries of numerical and categorical data as well as appropriate graphical and/or tabular representations
a. Identify patterns and striking deviations from patterns in data
b. Identify associations between variables for bivariate data
c. Apply technology to calculate statistical summaries and produce graphical representations
3. Use the distribution of sample statistics to quantify uncertainty and apply the basic concepts of probability into statistical arguments
a. Interpret point and interval estimates
4. Identify, conduct, and interpret appropriate parametric hypothesis tests
a. Identify the appropriate test based on variable type
b. Identify situations where a one or two tailed test would be appropriate
c. Conduct tests of one and two means
d. Conduct tests of one and two proportions
e. Explain the distinction between statistical and practical significance and the potential for error in hypothesis test conclusions
f. Apply technology to perform hypothesis tests calculations
5.Assess relationships in quantitative bivariate data
a. Address questions relating correlation as a linear association between variables
b. Distinguish between correlation and causation within data
c. Apply technology to explore bivariate data
6. Calculate and interpret probabilities
a. Demonstrate an understanding of probability experiments, outcomes, and events
b. Recognize disjoint and independent events
c. Find and interpret empirical probabilities, including compound and conditional probabilities
d. Find probabilities and values for a normal distribution
e. Calculate probabilities using uniform, binomial, and Poisson distributions

Statistics

Grade 11/12

Prerequisite: Algebra II or Precalculus or Teacher Approval

Type of Credit: Math or Elective

This course provides mathematical techniques that help students critically read, interpret, report and communicate results of statistical studies along with analyzing assumptions, bias and limitations on statistics. We will use the distribution of sample statistics to give uncertainty a numerical representation through hypothesis testing, analysis of bivariate data and finally calculating and interpreting probabilities. This course is designed for student interested in Humanities, Social Studies and Liberal Arts at higher educational institutions. College Now course through LCC, MTH243Z.