

Oregon Community College Statistics Course Descriptions

Chemeketa CC

MTH243 (Probability and Statistics 1)

Introduces descriptive statistics. Covers data analysis, regression and correlation, counting and probability, common probability distributions, sampling, confidence intervals, and one-sample hypothesis testing. Prerequisite: Grade of C or better in MTH111 or equivalent. (F, W, Sp, Su, 4 Credits)

MTH244 (Probability and Statistics 2)

Offers a second course open to all majors covering testing two-sample problems, linear regression and correlation, chi-squared goodness of fit tests, one-way and two-way analysis of variance. Prerequisite: Grade of C or better in MTH243 or equivalent. (Sp, 4 Credits)

Blue Mountain CC

***MTH243 - Introduction to Probability and Statistics**

Credits - 4 Lecture - 4

Students will demonstrate knowledge of graphical and numerical descriptive statistics, probability theory, probability distributions, statistical inference, and regression. The emphasis will be on statistical inference making and on interpretation of results of statistical tests. A graphing calculator will be used as an aid to data description and statistical inference.

Prerequisite: MTH111 with "C" or higher or placement test

(no MTH 244)

Central Oregon CC

MTH 243 (MATHEMATICS FOR MANAGEMENT/LIFE/SOCIAL SCIENCE)

Introduces linear programming, probability and descriptive statistics for students majoring in business and social sciences. Includes graphical and algebraic techniques of solving linear programming problems, descriptive statistics, graphs of data, basic probability theory, random variables, and binomial and normal probability distributions. Recommended prerequisite: MTH 111 or instructor approval. A graphing calculator is required. TI-83 or TI-84 recommended.

MTH 244 (INTRODUCTION TO METHODS OF PROBABILITY AND STATISTICS)

Introduces methods of inferential statistical analysis. Includes sampling techniques, introduction to binomial and normal distributions, sampling distributions, the central limit theorem, confidence intervals, hypothesis testing for one and two-sample data, and tests of association: linear regression and categorical analysis. Real-world data sets and group activities are emphasized. Students will be introduced to and use a standard statistical software package. A graphing calculator is required. TI-83 or TI-84 recommended. Basic computer skills (especially spreadsheet knowledge) are desirable. Prerequisite: Grade of "C" or better in MTH 243 or MTH 243 equivalency met or instructor approval.

Clackamas CC

MTH-243 Statistics I

4 credits, Fall/Winter/Spring/Summer
Descriptive statistics, observational studies, experiments, elementary probability, random variables, and sampling distributions. Recommended: Pass RD-090 or placement in RD-115; pass WR-095 or placement in WR-121. Prerequisite: Pass MTH-105 or MTH-111 with a "C" or better or placement in MTH-112.

MTH-244 Statistics II

4 credits, Fall/Winter/Spring/Summer
Hypothesis tests and confidence intervals for one and two populations, linear regression, inference about regression, chi-square tests, and analysis of variance. A student project is required. Recommended: Pass RD-090 or placement in RD-115; pass WR-095 or placement in WR-121. Prerequisite: Pass MTH-243 with a "C" or better or instructor consent.

Clatsop CC

MTH 243

INTRODUCTION TO PROBABILITY AND STATISTICS

(4.00 Lecture Hrs./Wk.)

4 Credits

Students demonstrate their knowledge of descriptive statistics by the collection, summarization, and analysis of data and the use of current technology. For students majoring in the arts, sciences and business programs. **Prerequisite:** MTH 111 with a "C" grade or better, or instructor approval. **WINTER 2011, 2012**

MTH 244

INTRODUCTION TO PROBABILITY AND STATISTICS

(4.00 Lecture Hrs./Wk.)

4 Credits

Students demonstrate their knowledge of descriptive and inferential statistics through the use of basic one- and two-sample inferential techniques and current technology. For students majoring in the arts, sciences and business programs that require two terms of statistics. **Prerequisite:** MTH 243 with a "C" grade or better. **SPRING 2011, 2012**

Columbia Gorge CC

MTH 243 Statistics I, 4 Cr.

Topics include displaying data with graphs, numerical descriptions of data, producing data, elementary probability, probability distributions, and introduction to confidence intervals. Applications are investigated from science, business, and social science perspectives. TI graphing calculator with advanced statistical program and/or computer software required. Prerequisites: MTH 111C and placement into WR 121.

MTH 244 Statistics II, 4 Cr.

Topics include confidence interval estimation, tests of significance including ztests, t-tests, ANOVA, and chi-square; and inference for linear regression. Applications are investigated from science, business, and social science perspectives. Software is integrated throughout the course. TI Graphing calculator required. Prerequisite: MTH 243 and placement into WR 121.

MTH 111A College Algebra for Liberal Arts, 4 Cr.

Functions are investigated graphically, numerically, symbolically, and verbally. Logarithmic, exponential, polynomial and rational functions are explored. Statistics, probability, geometry, systems, citizenship math and fractals. Applications are investigated from Liberal Arts perspectives. Technology is integrated throughout. TI Graphing calculator required. Prerequisite: MTH 95 and placement into WR115.

MTH 111C College Algebra for Math, Science, & Engineering, 5 Cr.

Relations and functions are investigated graphically, numerically, symbolically, and verbally. Exponential, logarithmic, polynomial, power and rational functions are explored. Special topics include systems of linear and non-linear equations. Applications are investigated from science and engineering perspectives. Technology is integrated throughout the course. Students communicate results in oral and written form. Graphing calculator required. TI 89/92 plus recommended. Prerequisites: Successful completion of MTH 95 and a "C" or higher grade in WR 115.

Klamath CC

MTH 243

Covers concepts of elementary probability, frequency distributions and their graphs, probability distributions, descriptive statistics, confidence interval estimation, and interpretation of statistical results. Software is integrated throughout the course. Prior knowledge of Microsoft Excel is recommended. Prerequisite: Completion of MTH 095 with a "C" or better or placement into MTH 111. This course will be offered Spring and Fall term based on student demand. [F, SP] **Credits:** 4.00

(no MTH 244)

Lane CC

MTH 243 - Introduction to Probability and Statistics

Prerequisite: MTH 111 or equivalent courses with a grade of "C-" or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Discrete and continuous probability, data description and analysis, measures of central tendency and variability, binomial and other distributions, sampling distributions; basic concepts of statistical inference, including confidence intervals, hypothesis testing, correlation, and regression. Note: Students planning to take MTH 105 and MTH 243 must take MTH 105 first in order to apply the Mth 105 credits towards any Science/Math/Computer Science degree requirements. Students who complete MTH 105 after MTH 243 will have the MTH 105 credits counted as elective credits.

4.000 Credit hours

(no MTH 244)

(more related classes for Lane on the next page)

MTH 105 Introduction to Contemporary Mathematics.....4 credits Prerequisite: MTH 095 or equivalent courses with a grade of “C-” or better or pass a placement test through the Testing Office. Prerequisite grades or test scores must have been completed within the past four terms. Survey of Applications of Mathematics for non-science majors including probability, statistics, finance and exponential modeling. (Also available through Distance Learning). Note: MTH 105 will not meet any Science/Math/Computer Science degree requirements if taken after MTH 243; however, MTH 105 can be used as an elective if taken after MTH 243.

MTH 106 Introduction to Contemporary Math 2.....4 credits Prerequisite: MTH 105 with a grade of “C-” or better completed within the past four terms. College Now offering only. The second of a two term sequence involving problem solving with a variety of applications of mathematics. These applications include elementary probability and at least two of the following topics: history and uses of geometry, matrices and linear systems, Markov chains, game theory, graph theory involving routing and networks, mathematics of voting and apportionment, or other topics approved by the Mathematics Division

Linn – Benton CC

MTH 243 Introduction to Statistics

● (4 class hrs/wk, 4 cr) F/Sp

An introductory statistics course emphasizing interpretation of statistical results. The course focuses on sampling procedures, experimental design, descriptive statistics, and inferential statistical techniques to analyze survey and experimental data from a wide range of fields including health care, biology, psychology, physics and agriculture. Includes basic concepts in graphical interpretation of one and two variable data, probability, probability distributions (binomial, normal, t-Distribution, and chi-square), confidence intervals for means and proportions, and hypothesis testing. Prerequisite: MTH 111 College Algebra or equivalent.

MTH 245 Math for Biological/Management/Social Sciences

● (4 class hrs/wk, 4 cr) F/W/Sp

A survey course of discrete mathematics for non-physical science majors. Topics include systems of inequalities, linear programming, probability and probability distributions, and an introduction to descriptive statistics. This course emphasizes the use of computer spreadsheets to solve problems. Prerequisite: MTH 111 College Algebra, or equivalent.

Mount Hood CC

MTH243 Probability and Statistics I

Credits 4 (4 Lecture Hrs / Wk)

Su / F / W / Sp

This course is a descriptive statistics course including frequency distributions, common measures of central tendency and variability with elementary concepts of probability and certain probability distributions such as the normal and binomial are covered. The Central Limit Theorem and certain statistical inferences for both large and small samples are included. Some computer software experience is provided. A graphing calculator (TI-83+ or TI-84) is required, and a computer lab component is incorporated. Prerequisite: MTH105 or MTH111, each with a grade of C or better. Proficiency Required: Reading, Writing, Math.

MTH244 Statistics II

Credits 4 (4 Lecture Hrs / Wk)

Su / F / W / Sp

This is the second course in statistical studies that includes applications of inferential statistics concerning two populations, analysis of variance, linear regression, nonparametric statistics, contingency tables, quality control, and other selected topics such as forecasting, survey sampling, time series and decision theory are covered. Computer software experience is provided. A graphing calculator (TI-83+ or TI-84) is required, and a computer laboratory component is incorporated. Prerequisite: MTH243 with a grade of C or better. Proficiency Required: Reading, Writing, Math.

Oregon Coast CC

MTH 243 Introduction to Probability and Statistics I

4 class hrs/wk, 4 cr. Students demonstrate their knowledge of descriptive statistics by the collection, summarization, and analysis of data and the use of current technology. For students majoring in the arts, sciences and business programs. Prerequisite: MTH 111 with a “C” grade or better, or instructor approval. (May be offered only via distance education.)

MTH 244 Introduction to Probability and Statistics 2

4 class hrs/wk, 4 cr. Students demonstrate their knowledge of descriptive and inferential statistics through the use of basic one- and two-sample inferential techniques and current technology. For students majoring in the arts, sciences and business programs that require two terms of statistics. Prerequisite: MTH 243 with a “C” grade or better. (May be offered only via distance education.)

Portland CC

MTH243 Statistics I

Topics include displaying data with graphs, numerical descriptions of data, producing data, elementary probability, probability distributions, and introduction to confidence intervals. Applications are investigated from science, business, and social science perspectives. TI graphing calculator with advanced statistical programs and/or computer software, see instructor. Prerequisites: MTH 111B or 111C and their prerequisite requirements.
(more classes for PCC on the next page)

MTH244 Statistics II

Topics include confidence interval estimation; tests of significance including z-tests, t-tests, ANOVA, and chi-square; and inference for linear regression. Applications are investigated from science, business, and social science perspectives. TI graphing calculator with advanced statistical programs required and/or computer software, see instructor. Prerequisites: MTH 243 and its prerequisite requirements.

MTH111B Col Alg-Bus,Mgmt,Life, Soc Sci

Relations and functions are investigated graphically, numerically, symbolically, and verbally. Logarithmic functions, exponential functions, and systems of equations are explored. Special topics include polynomial and rational functions. Applications are investigated from business, management, life and social science perspectives. Technology is integrated throughout the course. TI graphing calculator required, see instructor at first class meeting. Prerequisites: WR 115, RD 115 and MTH 95 or equivalent placement test scores.

MTH111C Col Alg for Math,Science,Engin

Relations and functions are investigated graphically, numerically, symbolically, and verbally. Exponential, logarithmic, polynomial, power, and rational functions are explored. Special topics include systems of linear and non-linear equations. Applications are investigated from Science and Engineering perspectives. Technology is integrated throughout the course. Students communicate results in oral and written form. Prerequisite: WR 115, RD 115 and MTH 95 or equivalent placement test scores. Graphing calculator required; TI 89, TI 92 or Voyage 200 recommended.

Rogue CC

MTH243 4 credits Probability and Statistics w/Lab

Descriptive statistics covering the nature and presentation of data, measures of central tendency, probability and probability distributions (normal and binomial), confidence intervals, sample sizes, and tests of hypotheses. Course is graded A through F. Prerequisites: MTH95 and RD30 or designated placement test score as shown on current indicator chart; a graphing calculator is required (instructor will be using the TI-83 or TI-84 graphing calculator in class). There is a significant online component in this class.

MTH244 4 credits Inferential Statistics

Covers inferential statistics with an emphasis on applications. Topics include: review of estimation, hypothesis testing, correlation and regression, inferences using Chisquare, the F distribution, and one-way and two-way ANOVA. Course is graded A through F. Prerequisites: MTH243; a graphing calculator is required (instructor will be using the TI-83 or TI-84 graphing calculator in class); and CS125ss (one-credit version) highly recommended. There is a significant online component in this class.

Southwestern Oregon CC

MTH243/BA232 Introduction to Probability and Statistics 4 credits (4 lec hrs/wk)

Introduces elementary statistics techniques to aid decision-making in the business environment. Emphasis is on statistical inference, probability, sampling, estimation, and hypothesis testing.

Prerequisite: MTH95 with a 'C' or better.

(no MTH 244)

Tillamook Bay CC

MTH 243 Statistics I, 4 Cr.

Topics include displaying data with graphs, numerical descriptions of data, producing data, elementary probability, probability distributions, and introduction to confidence intervals. Applications are investigated from science, business, and social science perspectives. TI graphing calculator with advanced statistical programs and/or computer software, see instructor. Prerequisites: MTH 111B or 111C and placement into WR 121.

MTH 244 Statistics II, 4 Cr.

Topics include confidence interval estimation; tests of significance including z-tests, t-tests, ANOVA, and chi-square; and inference for linear regression. Applications are investigated from science, business, and social science perspectives. TI graphing calculator with advanced statistical programs required and/or computer software, see instructor. Prerequisites: MTH 243; placement into WR 121.

MTH 111B College Algebra-Business, Management, Life & Social Science, 5 Cr.

Relations and functions are investigated graphically, numerically, symbolically, and verbally. Logarithmic functions, exponential functions, and systems of equations are explored. Special topics include polynomial and rational functions. Applications are investigated from business, management, life and social science perspectives. Technology is integrated throughout the course. TI graphing calculator required, see instructor at first class meeting. Prerequisites: Successful completion of MTH 95, and a "C" or higher grade in WR 115, or reading and writing placement scores for WR 121, a "C" or higher grade in RD 115, or college-level reading skills. [Winter Term]

(more related classes for TBCC on the next page)

MTH 111C College Algebra for Math, Science, & Engineering, 5 Cr.

Relations and functions are investigated graphically, numerically, symbolically, and verbally. Exponential, logarithmic, polynomial, power, and rational functions are explored. Special topics include systems of linear and non-linear equations. Applications are investigated from science and engineering perspectives. Technology is integrated throughout the course. Communicate results in oral and written form. Graphing calculator required. TI-89, TI-92 or Voyage 200 recommended. Prerequisites: Successful completion of MTH 95, and a "C" or higher grade in WR 115, or reading and writing placement scores for WR 121, a "C" or higher grade in RD 115, or college-level reading skills. [Fall Term]

Treasure Valley CC

MATH 243 4 Credits INTRO TO PROBABILITY & STATISTICS I

Introduces elementary statistics, including frequency, descriptive statistics, correlation, regression, measures of center probability, binomial and standards distributions and central limit theorem. Prerequisite: Pass MATH 111 or 105 with a "C" or better, or suitable placement score.

MATH 244 4 Credits INTRO TO PROBABILITY & STATISTIC II

Continues the study of statistics, covering inferential statistics, hypothesis testing, rank correlation, signed rank test, population proportions, Kruskal-Wallis test, Chi-Square, and non-parametric methods. Prerequisite: Pass MATH 243 with a "C" or better.

Umpqua CC

MTH 243: Introduction to Probability & Statistics (4)

Introductory course in probability and statistics, designed to acquaint the student with some basic theory and applications. Calculators will be used throughout the course. Basic topics include probability models, random variables, probability distributions, sampling distributions, descriptive statistics, and methods of estimation. Instructor Enforced Prerequisite: MTH 105 or above with a grade of C or better, or instructor permission. 4 lecture hrs/wk. W,S

(no MTH 244)

OUS Statistics Course Descriptions (close to MTH 243/244)

Portland State University

Stat 243, 244

Introduction to Probability and Statistics I, II (4, 4 credits)

A basic course in statistical analysis including presentation of data probability, probability distributions, sampling distributions, estimation, tests of significance, experimental design and analysis of variance, regression and correlation, nonparametric statistics, selected topics, applications, and use of statistical computer packages. A broad nontechnical survey designed primarily for non-math students who need to utilize the subject in their own fields. Not approved for major credit. Courses must be taken in sequence. Prerequisite: second year high school algebra, Mth 95, or equivalent, or satisfactory score on the placement exam.

Stat 105 Elementary Data Analysis (4 credits)

A course in exploration of data analysis and basic statistical topics. May include descriptive statistics, graphical and tabular summaries, computer software, confidence intervals, correlation and regression. Recommended: second-year high school algebra or equivalent.

University of Oregon

243 Introduction to Methods of Probability and Statistics (4)

Discrete and continuous probability, data description and analysis, sampling distributions, emphasizes confidence intervals and hypothesis testing. Prereq: MATH 95 or satisfactory placement test score; a programmable calculator capable of displaying function graphs. MATH 111 recommended preparation. Students cannot receive credit for both MATH 243 and 425.

425/525, 426/526 Statistical Methods I,II (4,4)

Statistical methods for upper-division and graduate students anticipating research in nonmathematical disciplines. Presentation of data, sampling distributions, tests of significance, confidence intervals, linear regression, analysis of variance, correlation, statistical software. Prereq: MATH 111 or satisfactory placement test score. Only nonmajors may receive upper-division or graduate credit. Students cannot receive credit for both MATH 243 and 425.

Oregon State University

MTH 245 MATHEMATICS FOR MANAGEMENT, LIFE, AND SOCIAL SCIENCES (4)

Techniques of counting, probability and elements of statistics including binomial and normal distributions. Introductory matrix algebra. Elements of linear programming. Lec/rec. (Bacc Core Course) **PREREQS:** MTH 111

Southern Oregon University

MTH 243 - Elementary Statistics 4 credits

Emphasizes the basic concepts and techniques of probability, descriptive, and inferential statistics. Topics include describing the distribution of data graphically and numerically, standard scores, normal distribution, empirical rule, sampling distributions, confidence intervals, hypothesis testing of both one and two populations, and linear regression. Introduces appropriate technology to display and analyze data. Appropriate calculators are required. Approved for University Studies (Quantitative Reasoning). Prerequisite(s): MTH 95 or an appropriate SOU placement level.

MTH 244 - Applied Inferential Statistics 4 credits

Presents an assortment of tools from inferential statistics with an emphasis on applications. Reviews the concepts of hypothesis testing and confidence intervals. Introduces probability distributions of test statistics for various inferential statistical problems. Includes Analysis of Categorical Data (Chi-Square Goodness of Fit Test), Analysis of Variance (ANOVA), Nonparametric Statistics, and a brief introduction to Multiple Linear Regression. Applies the concepts and procedures with appropriate software tools for data analysis. Prerequisite(s): MTH 243 .

Eastern Oregon University

STAT 241 – Elementary Statistics I*SMI Credits: 2.00 Gen Ed Core-Natural, Math & Info Sciences

This course is the first of a two course sequence. The two course sequence will be equivalent in credit and content to STAT 243 “Elementary Statistics”. Topics include experimental design, introduction to histograms, the normal distribution, sampling, the Law of Averages, and the Central Limit Theorem. Prerequisites: MATH 095.

STAT 242 – Elementary Statistics II*SMI Credits: 2.00 Gen Ed Core-Natural, Math & Info Sciences

This course is the second of a two course sequence. The two course sequence will be equivalent in credit and content to STAT 243 “Elementary Statistics”. Topics include sampling error, confidence intervals, and hypothesis testing including z-tests and chi-square tests. Prerequisites: STAT 241.

STAT 243 - Elementary Statistics Credits: 4.00

This is an introduction to concepts of statistical data analysis including experimental design, descriptive statistics, the normal distribution, confidence intervals and hypothesis testing. Students will also work with statistical computing packages such as MINITAB. (Students cannot receive credit for both STAT 243 and STAT/PSY 327). Prerequisites: MATH 095.

STAT 244 – Correlation & Regression Credits: 1.00

This is an introduction to concepts of linear correlation and Regression analysis. Students will also work with statistical computing packages such as MINITAB. Prerequisites: STAT 241 or STAT 243 (prerequisite or co-requisite).

Oregon Institute of Technology

MATH 243 Introductory Statistics

(4-0-4) Descriptive statistics, numerical and graphical presentation of data, estimation and margin of error, hypothesis testing, correlation; interpretation of statistical results. Cannot be taken for graduation credit by students who have taken MATH 361. Prerequisite: MATH 100 or instructor’s consent

MATH 361 MATH 362 Statistical Methods I, II

(361-F,W,S)(4-0-4); (362-S)(4-0-4) Graphical representation of statistical data, measures of central tendency and variability, and elementary probability. Applications of binomial, normal, “t,” “F,” and chi-square distributions; tests of hypothesis; regression and correlation analysis. Multiple regression, analysis of variance and design and analysis of experiments. Prerequisite: For MATH 361–MATH 111 or instructor’s consent. Prerequisite: For MATH 362–MATH 361 or MATH 465 with grade “C” or better.