COURSE SLO STATEMENTS REPORT

ECC - MATH (MATH AND SCIENCE MAJORS)

Course ID	Course Name	Course SLO Title	Course SLO Statement	Course SLO Status	Input Date
ECC: MATH 170	Trigonometry	SLO #1 UNDERSTANDING CONCEPTS	Students will explain and demonstrate basic trigonometric concepts and definitions.	Active	11/21/2013
ECC: MATH 170	Trigonometry	SLO #2 SOLVING PROBLEMS	Students will solve trigonometric application problems, including those involving the laws of sines and cosines.	Active	11/21/2013
ECC: MATH 170	Trigonometry	SLO #3 GRAPHS	Students will create, interpret and analyze the graphs of trigonometric functions and their inverses.	Active	11/21/2013
ECC: MATH 170	Trigonometry	SLO #4 PROOFS	Students will analyze and construct proofs of trigonometric identities.	Active	11/21/2013
ECC: MATH 180	Pre-Calculus	SLO #1 UNDERSTANDING CONCEPTS	Students will explain and demonstrate basic precalculus concepts by solving equations, inequalities and systems involving algebraic, exponential, logarithmic, trigonometric, and absolute value expressions.	Active	11/21/2013
ECC: MATH 180	Pre-Calculus	SLO #2 SOLVING PROBLEMS	Students will use polynomial, rational, exponential, logarithmic, and trigonometric equations and functions to set up and solve application and modeling problems.	Active	11/21/2013
ECC: MATH 180	Pre-Calculus	SLO #3 GRAPHS	Students will create, interpret and analyze the graphs of polynomial, rational, exponential, logarithmic, trigonometric, parametric, polar and conic equations.	Active	11/21/2013
ECC: MATH 180	Pre-Calculus	SLO #4 PROOFS	Students will analyze and construct proofs, including proofs by induction.	Active	11/21/2013
ECC: MATH 190	Single Variable Calculus and Analytical Geometry I	SLO #1 UNDERSTANDING CONCEPTS	Students will explain and demonstrate the idea of the limit, the derivative and the integral.	Active	11/21/2013
ECC: MATH 190	Single Variable Calculus and Analytical Geometry I	SLO #2 SOLVING PROBLEMS	Solve problems, including problems involving velocity and acceleration, by using derivatives and integrals.	Active	11/21/2013
ECC: MATH 190	Single Variable Calculus and Analytical Geometry I	SLO #3 GRAPHS	Students will use techniques of calculus to determine maxima, minima, and points of inflection on the graph of a function.	Active	11/21/2013
ECC: MATH 190	Single Variable Calculus and Analytical Geometry I	SLO #4 PROOFS	Students will analyze and construct proofs involving limits, derivatives, and integrals.	Active	11/21/2013
ECC: MATH 191	Single Variable Calculus and Analytical Geometry II	SLO #1 UNDERSTANDING CONCEPTS	Students will explain and demonstrate advanced integration techniques and convergence of sequences and series.	Active	11/21/2013
ECC: MATH 191	Single Variable Calculus and Analytical Geometry II	SLO #2 SOLVING PROBLEMS	Students will use integrals to evaluate volumes, surface area and arc length.	Active	11/21/2013
ECC: MATH 191	Single Variable Calculus and Analytical Geometry II	SLO #3 GRAPHS	Students will use limits, derivatives and integration to analyze graphs of parametric equations, polar equations, and conic sections.	Active	11/21/2013
ECC: MATH 191	Single Variable Calculus and Analytical Geometry II	SLO #4 PROOFS	Students will analyze and construct proofs to determine convergence and divergence of sequences and series.	Active	11/21/2013
ECC: MATH 210	Introduction to Discrete Structures	SLO #1 UNDERSTANDING CONCEPTS	Students will explain and demonstrate an understanding of the key principles of logic, number theory, combinatorics, probability and	Active	11/21/2013

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ECC: MATH 210	Introduction to Discrete Structures	SLO #1 UNDERSTANDING CONCEPTS	graph theory.	Active	11/21/2013
ECC: MATH 210	Introduction to Discrete Structures	SLO #2 SOLVING PROBLEMS	Students will use logic, functions, number theory, and combinatorics to solve a variety of problems, including application problems and computer science algorithm analysis.	Active	11/21/2013
ECC: MATH 210	Introduction to Discrete Structures	SLO #3 GRAPHS	Students will analyze and solve problems in graph theory.	Active	11/21/2013
ECC: MATH 210	Introduction to Discrete Structures	SLO #4 PROOFS	Students will analyze and construct proofs in logic, number theory, combinatorics, probability and graph theory.	Active	11/21/2013
ECC: MATH 220	Multi-Variable Calculus	SLO #1 UNDERSTANDING CONCEPTS	Students will explain and demonstrate partial derivatives, multiple integrals and the major theorems of vector calculus.	Active	11/21/2013
ECC: MATH 220	Multi-Variable Calculus	SLO #2 SOLVING PROBLEMS	Students will calculate partial derivatives for a function of more than one variable and use them to solve multivariable optimization problems; and evaluate double and triple integrals, and apply them to physical problems such as moments and centers of mass.	Active	11/21/2013
ECC: MATH 220	Multi-Variable Calculus	SLO #3 GRAPHS	Students will analyze the graphs and equations of curves and surfaces in three-dimensional space, as well as vector fields.	Active	11/21/2013
ECC: MATH 220	Multi-Variable Calculus	SLO #4 PROOFS	Students will analyze and apply Green’s, Stokes, and Gauss’ Theorems.	Active	11/21/2013
ECC: MATH 270	Differential Equations with Linear Algebra	SLO #1 UNDERSTANDING CONCEPTS	Students will explain and demonstrate the key concepts of linear algebra, including determinants, vector spaces and linear transformations.	Active	11/21/2013
ECC: MATH 270	Differential Equations with Linear Algebra	SLO #2 SOLVING PROBLEMS	Students will use differential equations and linear algebra to solve a variety of problems, including application problems.	Active	11/21/2013
ECC: MATH 270	Differential Equations with Linear Algebra	SLO #3 GRAPHS	Students will use graphical techniques to solve differential equations or systems of differential equations.	Active	11/21/2013
ECC: MATH 270	Differential Equations with Linear Algebra	SLO #4 PROOFS	Students will analyze and construct proofs relevant to differential equations and linear algebra.	Active	11/21/2013