

Assessment Plan & Student Learning Outcomes

Mathematics (BS)

Outcome: Algebra and Number Theory

Students will demonstrate knowledge of algebra and number theory

Outcome Status: Active

Outcome Type: Academic Program Learning

Start Date: 07/01/2009

Specific Assessments

Course Exam - On the final exam for Math 302, students will demonstrate understanding of groups, specifically by correctly finding all integral solutions of a linear Diophantine equation (Active)

Criterion: 70% of students shall score 3 or higher on the Algebra and Number Theory rubric

Course Exam - On the final exam for Math 302, students will demonstrate knowledge of equivalence relations, specifically by finding the least nonnegative solution of a system of congruences (Active)

Criterion: 70% of students shall score 3 or higher on the Algebra and Number Theory rubric

Course Exam - Students will demonstrate knowledge of modern algebra. (Active)

Criterion: 70% or more of students will earn a median rubric score of 3.0 or higher

Outcome: Applied Mathematics

Students will demonstrate knowledge of applied mathematics

Outcome Status: Active

Outcome Type: Academic Program Learning

Start Date: 07/01/2009

Specific Assessments

Course Exam - On the final exam for Math 312, students will construct solution to a one-stage application problem, specifically by 1) finding marginal distribution given joint distribution of two discrete random variables, and 2) finding variance, covariance, correlation, marginal densities and expected value of both discrete and continuous random variables (Active)

Criterion: 70% of students shall score 3 or higher on the Applied Mathematics rubric

Course Exam - Demonstrate ability to construct solution to a one-stage applied problem (Active)

Criterion: 70% of students shall score 3 or higher on the Applied Mathematics rubric

Related Documents:

[Applied math rubric](#)

Mathematics (BS)

Outcome: Analysis

Students will demonstrate knowledge of analysis

Outcome Status: Active

Outcome Type: Academic Program Learning

Start Date: 07/01/2009

Specific Assessments

Course Exam - Demonstrate mastery of linear algebra; e.g., matrices, vector spaces, Jordan canonical form, determinants, etc. (Active)

Criterion: 70% of students will score 3 or higher on the analysis rubric

Related Documents:

[Fall 2019 MATH 302 - 01 Mikula.xlsx](#)

[Fall_19 Reporting grid MATH 307-01 Steve Williams.xlsx](#)

[Fa_2019 Sp_20 Reporting grid MATH 142-01 Maynard.xlsx](#)

[Reporting grid Spring 2020 MATH 311 - 01 Mikula.xlsx](#)

[Reporting grid Spring 2020 MATH 310 - 01 Mikula.xlsx](#)

[MATH312 Reporting grid for Sp_20 Maynard.xlsx](#)

[Technology Competency outcome_MATH312_Sp_20 Maynard.xlsx](#)

Course Exam - On the final exam for MATH 243, students will demonstrate mastery of sequences and series by finding the interval of convergence of a power series and the limit of the power series for all x in its interval of convergence (Active)

Criterion: 70% of students shall score 3 or higher on the Analysis rubric

Course Exam - On the final exam for MATH 243, students will demonstrate mastery of applications of calculus by finding the function modeling application and the extrema of a real-valued function with multi-dimensional domain (Active)

Criterion: 70% of students shall score 3 or higher on the Analysis rubric

Course Exam - On the final exam for MATH 243, students will demonstrate mastery of evaluating double integrals by finding the volume of a given solid. (Active)

Criterion: 70% of students shall score 3 or higher on the Analysis rubric

Course Exam - Students demonstrate knowledge and understanding of limit, continuity, differentiation, integration, sequences, and series as well as techniques and applications of calculus and analysis. (Active)

Criterion: 70% or more of students will attain a median rubric score of 3.0 or higher

Related Documents:

[Analysis rubric](#)

Outcome: Geometry

Students demonstrate knowledge of euclidean and non-euclidean geometries.

Outcome Status: Active

Outcome Type: Academic Program Learning

Start Date: 08/01/2011

Specific Assessments

Mathematics (BS)

Course Exam - Students will demonstrate knowledge of euclidean and non-euclidean geometries. (Active)

Criterion: 70% of more of students will earn a median rubric score of 3.0 or higher on the geometry rubric.

Course Exam - Students will prove the validity of a Euclidean construction. (Active)

Criterion: 70% or higher of the students shall earn a median score of 3 or higher on the geometry rubric.