

Student Learning Outcomes for MATH 2B

Linear Algebra

Team Members:

Team Leader:

[Hassan Bourgoub](#) (8806) in MATH

Other members:

1. [Hassan Bourgoub](#) (x8806) MATH

Additional team members/notes about team:

Bert Lo, Hassan Bourgoub, Mehrdad Khosravi, Rick Taylor, Farshod Mosh

Additional Notes:

Outcomes:

Outcome 1 Phase I: Statement

Construct and evaluate linear systems/models to solve application problems.

Outcome 1 Phase II: Assessment Strategy Used:

Assessment Quarter: Winter 2011

Assessors: Hassan Bourgoub, Hassan Bourgoub Mehrdad Khosravi

Assessment Tools: •

Outcome 1 Phase III: Reflect & Enhance

Number of people involved in Phase III: 2

Changes:

None. This was the first time we taught the class.

Methods:

We put a few questions on the test to evaluate students understanding of linear systems/models and solving problems using methods of linear algebra.

Findings and Conclusions:

Most students were able to construct and evaluate linear systems/models to solve

application problems. Some students had difficulties evaluating a linear system due to computation errors but they felt more comfortable with the problems once solve in class.

Enhancement (Planned Actions)**Part I:**

We added more examples similar to those problems in the test to make students more comfortable with the material.

Part II:

None.

Outcome 2 Phase I: Statement

Solve problems by deciding upon and applying appropriate algorithms/concepts from linear algebra.

Outcome 2 Phase II: Assessment Strategy Used:

Assessment Quarter: Winter 2011

Assessors: Hassan Bourgoub Mehrdad Khosravi

Assessment Tools: *No tools assigned.*

Outcome 2 Phase III: Reflect & Enhance

Number of people involved in Phase III: 2

Changes:

None. This was the first quarter we taught this class.

Methods:

We gave the students two tests and in each test we gave them problems to evaluate their understanding of linear systems and other concepts from linear algebra.

Findings and Conclusions:

Most students were able to solve problems by deciding upon and applying appropriate algorithms/concepts from linear algebra. Some students had difficulties in applying the appropriate algorithm how ever after seeing the solution on the board they felt a lot more comfortable.

Enhancement (Planned Actions)**Part I:**

We changed the lecture to include more examples and explained similar problems to help the student understand those test problems better.

Part II:

None.

Outcome 3 Phase I: Statement

Apply theoretical principles of linear algebra to define properties of linear transformations, matrices and vector spaces.

Outcome 3 Phase II: Assessment Strategy Used:

Assessment Quarter: Winter 2011

Assessors: Hassan Bourgoub, Hassan Bourgoub Mehrdad Khosravi

Assessment Tools: •

Outcome 3 Phase III: Reflect & Enhance

Number of people involved in Phase III: 2

Changes:

None. This was the first time we taught this class.

Methods:

We used two test and designated a few questions to test students understanding of theoretical principles of linear algebra to define properties of linear transformations, matrices and vector spaces.

Findings and Conclusions:

Most students seem to be able to apply theoretical principles of linear algebra to define properties of linear transformations, matrices and vector spaces. However some students had difficulties understanding the properties of linear transformations.

Enhancement (Planned Actions)

Part I:

We changed the lectures to include more examples of linear transformations for students to understand the concept and be able to apply it to problems.

Part II:

None.

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