

Project and Assessments in Math for the Liberal Arts

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Topics in MA103

Instructors choose five topics:

- Set Theory
- Logic
- Linear Programming*
- Financial/Consumer Mathematics*
- Geometry
- Probability
- Statistics

* denotes a required topic

From My Syllabus

Evaluation:

LP Project	10%
M3 Project	10%
Geometry Project	10%
Research Presentation	10%
Homework	20%
Midterm	15%
Final Exam	15%
Active Learning	10%

Linear Programming Project

Sample Problem: (worth 30 points)

The Pizza Palace can make a maximum number of 125 large pizzas a day. The pizza chef estimates that, at most, he will prepare 100 large cheese pizzas and 75 large pepperoni pizzas. The restaurant charges \$12 for a cheese pizza and \$14 for a pepperoni pizza. How many pizzas of each type must the Pizza Palace sell to maximize sales?

Linear Programming Project

In groups (of 2 or 3)

- They choose 160 points worth of similar problems
- They also create an original problem and solve it (worth 40 points)
- Rubric is given on how they will be graded
- I emphasize correctness and classiness

Geometry Project

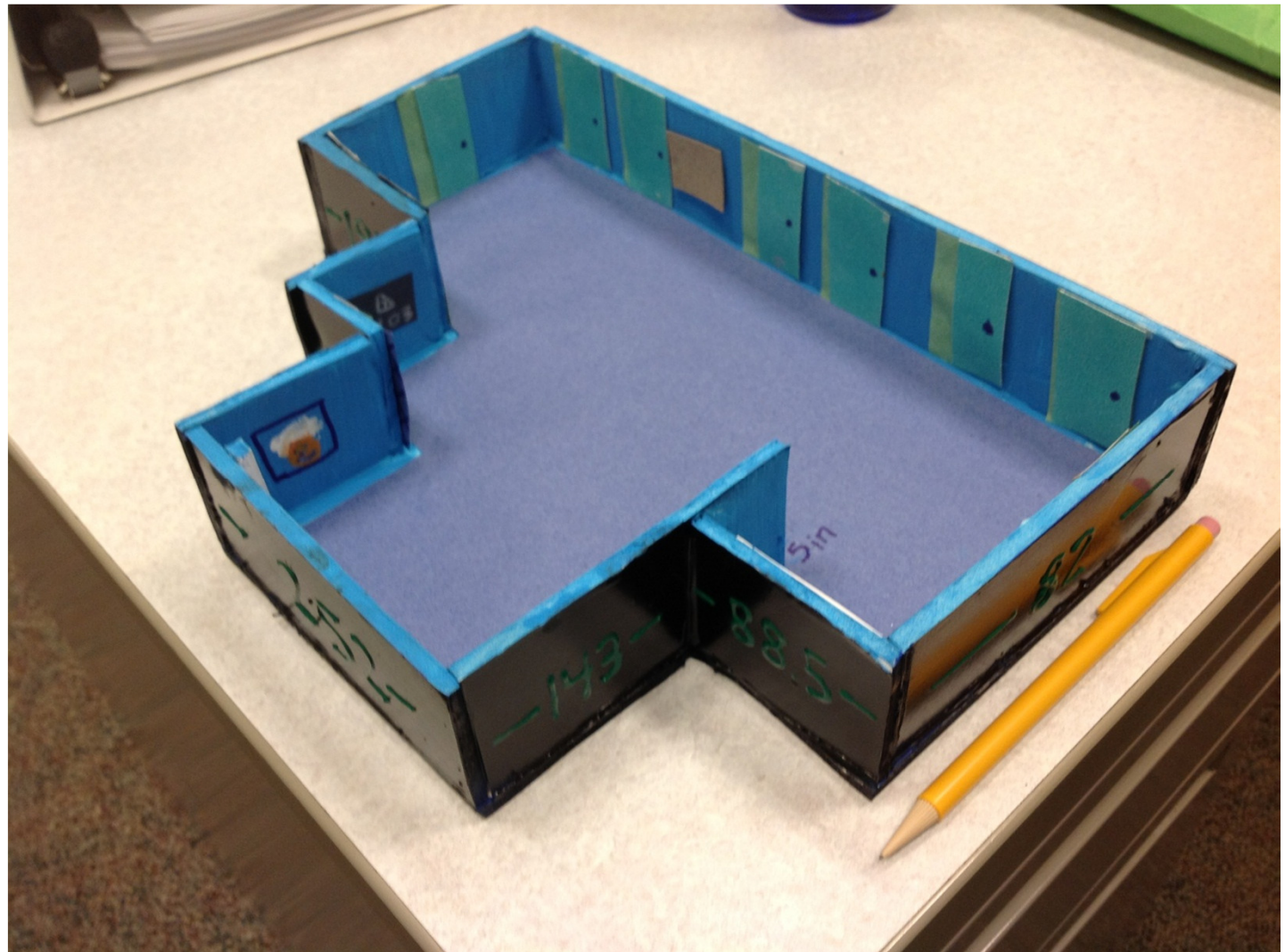
They have to calculate the cost of painting our math common area.

They work in groups, but submit individual diagrams and calculations.

Geometry Project

Geometry Project

Geometry Project



Mortgage Project

- In pairs, find jobs/salaries of chosen careers
- Find a house they want to buy
- Find a lender (current interest rates) for 15 and 30 year mortgages
- Fill in [worksheets](#)
- Write a short paper on ARMS

Projects

- [Research Presentation](#) and [Rubric](#)
- [Grade Your Teammates](#)
- To recap, projects are my major way to assess my students.
- This way, they leave the course with fond memories and a better outlook on mathematics.*

Assessment of Student Learning

- Background
- How We Did It
- What We Learned
- Discussion

Background

- Maryland Higher Education Commission
- Middle State Accreditation
 - Standard 12
 - Standard 14

How We Did It

- Link each assessment question to a specific General Education competency;
- Work with FCC Institutional Effectiveness Department.
 - Design a [webportal](#) to submit data
 - Analyze the data for us

What We Learned

- Our students struggle to utilize quantitative reasoning skills.
- Share the assessment results and ask for feedback
- Continuous discussions enhances student learning.