



Modular of Girl
Architectural Design
Math and Science Matter 2011
Dutchess Community College

On March 5, the Architecture Faculty at Dutchess Community College again presented two workshops at Math and Science Matters for Young Women.

Catherine McGuire, Paul Pilon and David Freeman presented two double workshops to forty girls titled “Modular of Girl”. The workshop had the girls designing a small sustainable garden with all measurements based on a common modular based on the average size of a teenage girl.

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Catherine McGuire started the day with a presentation on common modularity used in architecture. Catherine explained the math behind the Greeks' development of the Golden Mean. She discussed the history of modern design and the introduction of the idea of the Modular of Man by Le Corbusier, a famous French architect.

Paul Pilon explained how architects use scale to create a drawing on a paper. He demonstrated the math used to draw a full size house at $\frac{1}{4}$ " scale on paper.

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The girls then developed a scale for their projects based on the Modular of a Girl. David Freeman measured several girls to establish a common height. The girls then assembled a scale to be used to construct their projects.

David explained different ideas of sustainable and green design that could be incorporated into the project. He introduced green building principles to deal with sun, shading, wind and water conservation.

Catherine introduced the project to design a small garden with all dimensions based on the modular of a girl with sustainable design principles.

The girls were divided into groups of four with each group designing a garden.

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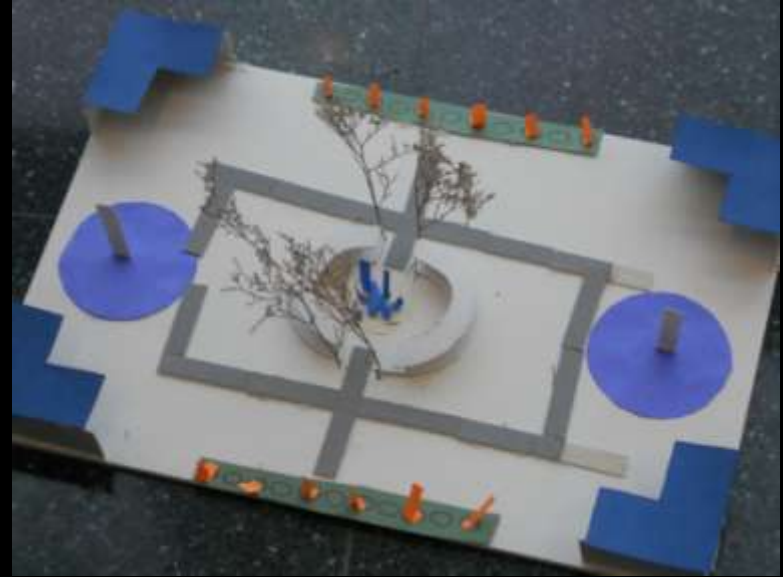
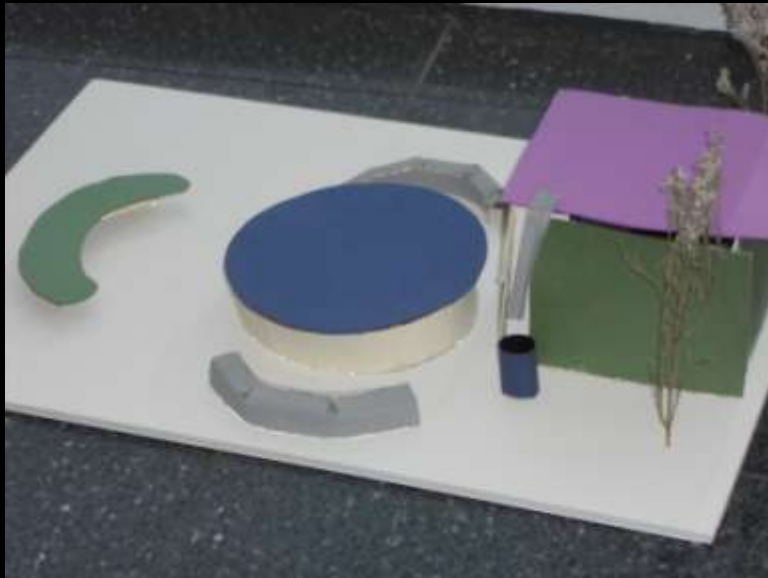


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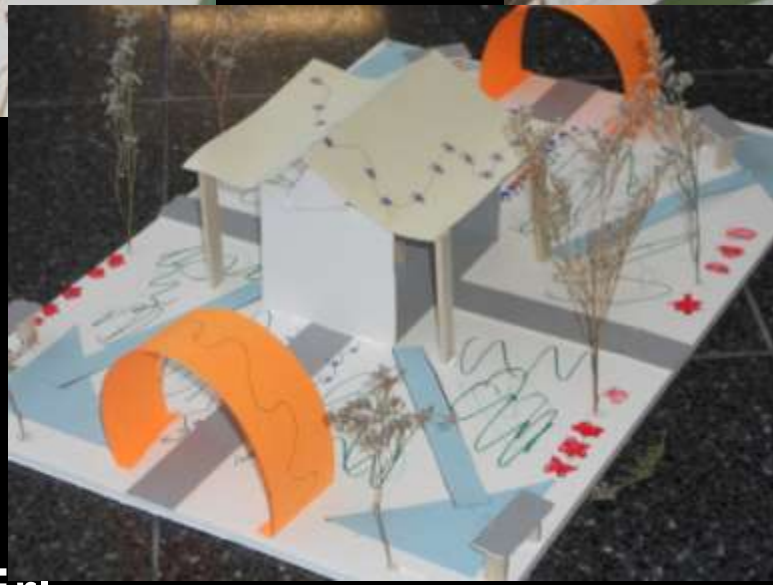
At the end of the two hours the girls presented their designs to each other explaining the ideas and sustainable features.



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The projects were displayed in the hall for all participants in the event to see.



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