

Sustainability Integrated into the Curricula of Four Civil Engineering Courses



NORWICH UNIVERSITY

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The Research Methods, Tools, and Impacts of the EOP-ASEE Grant

INTRODUCTION

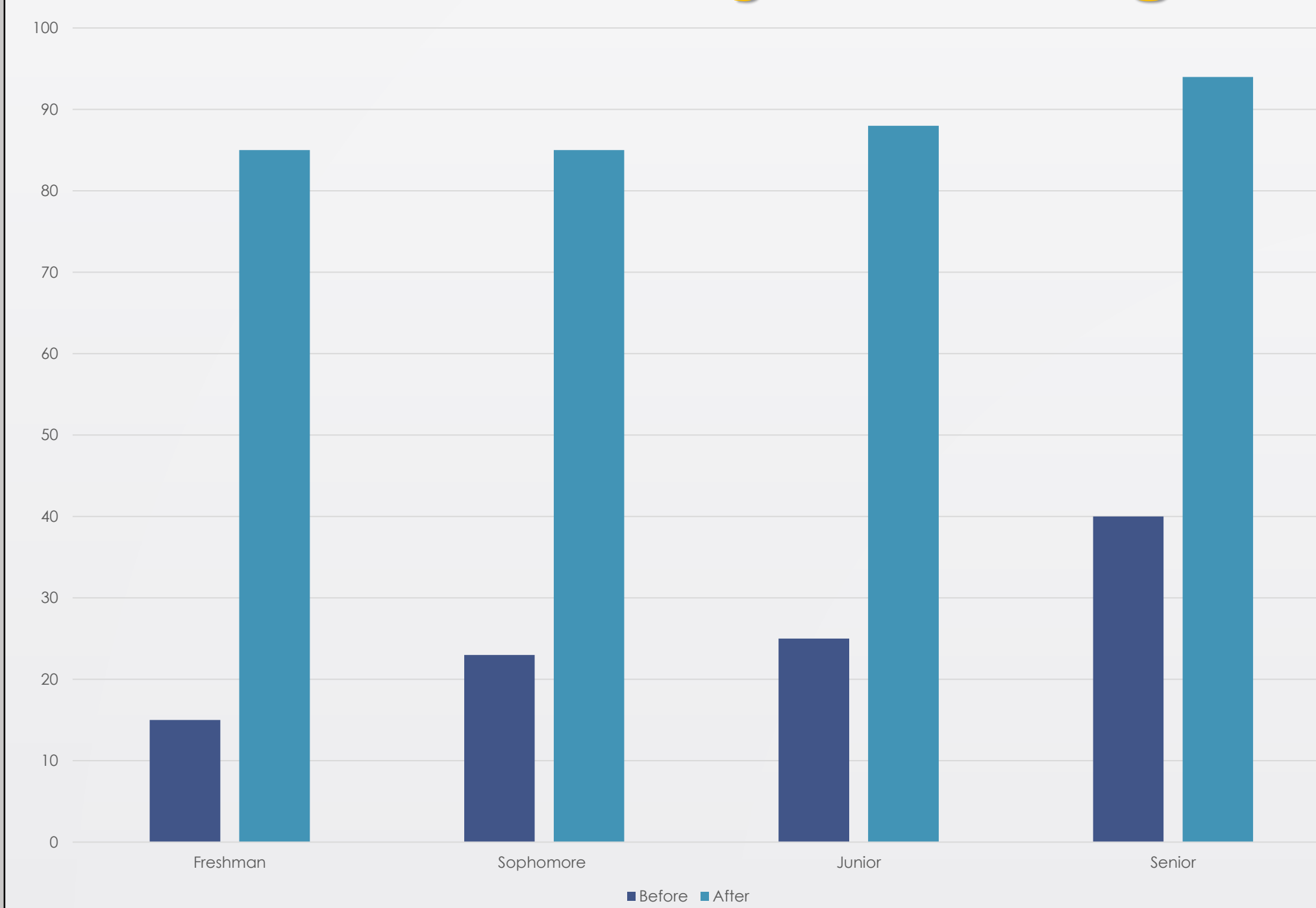
1. Introduction to Engineering- Freshman Level
2. Building Information Modeling- Sophomore Level
3. Engineering Economics-Junior Level
4. Senior Capstone Projects-Senior Level

Freshman Level

1. Survey One
2. Survey Two
3. A Written Report
4. Photovoice
5. Two Field Trips

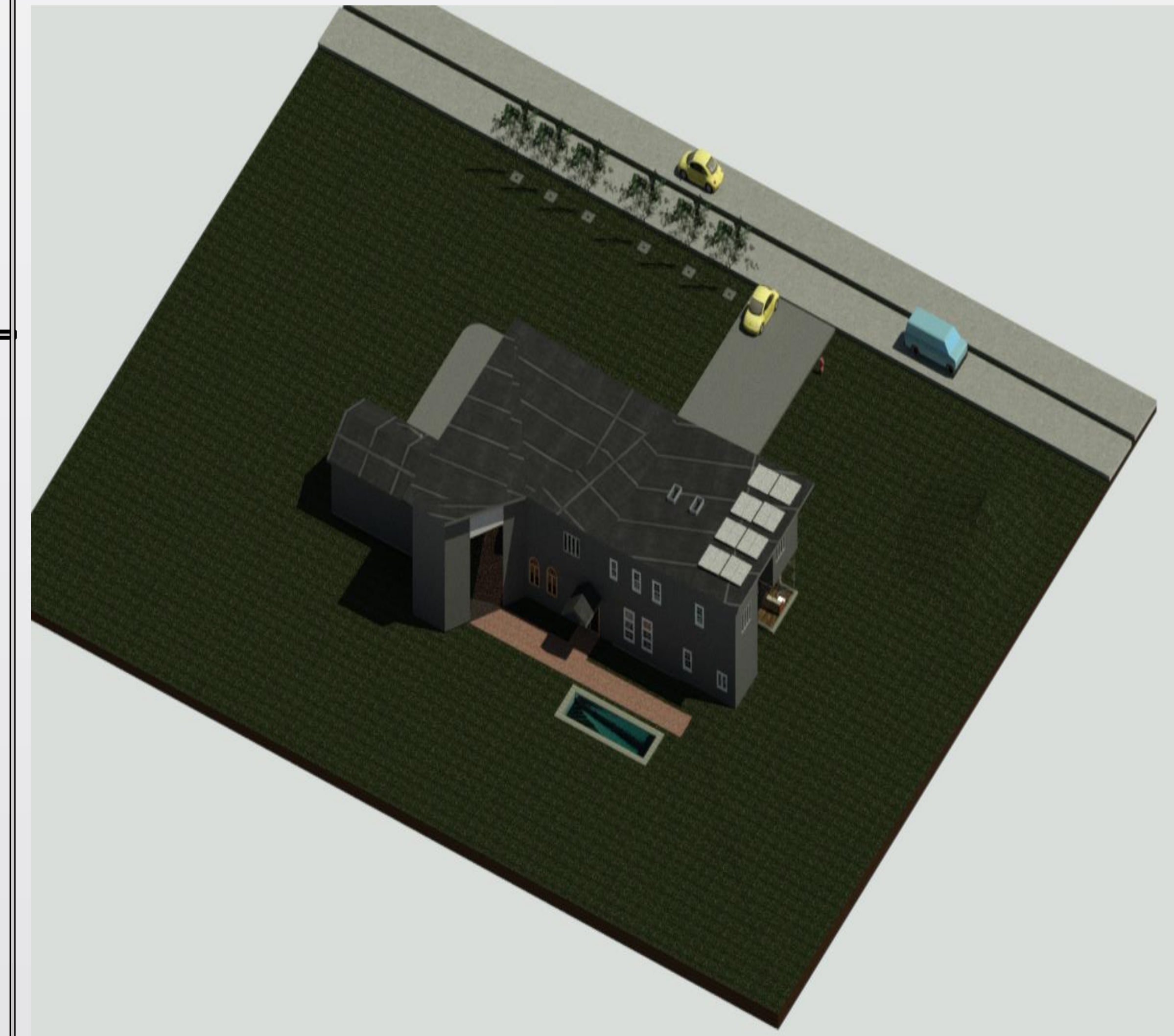


Sustainability Knowledge



Sophomore Level

1. Survey One
2. Survey Two
3. 3D BIM Module of a Dream House (Single-Family Home)
4. The (NAHB) National Association of Home Builders Scoring System
5. A Written Report
6. Photovoice



Senior Level

1. Survey One
2. Survey Two
3. Senior Capstone Project
4. LEED Certificate.
5. A Written Report
6. Photovoice

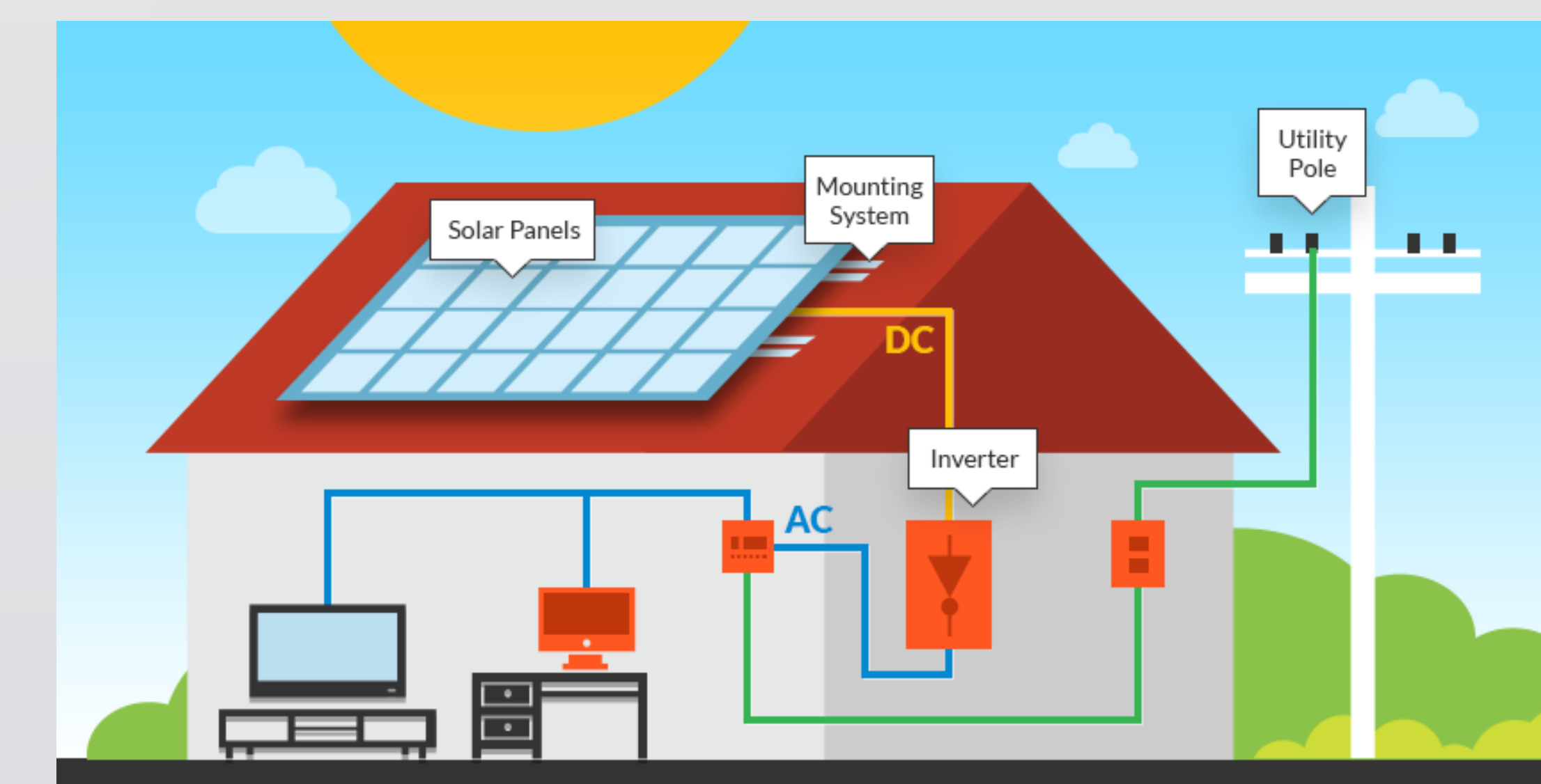


Freshman Level

Outdoor & Indoor Water Efficiency-On-Campus Building-Grading Rubric -Semester Project Report		Points	
		Existing Condition	Retrofitting into Green
A	Conduct a Water Audit A water audit helps identify current water usage patterns, inefficiencies, and areas where consumption can be reduced. Key steps include:		
B	Install Water-Efficient Fixtures and Appliances		
C	Implement Greywater Recycling Systems		
D	Use Rainwater Harvesting Systems		
E	Upgrade Irrigation Systems		
		Total 0	

Junior Level

1. Survey One
2. Survey Two
3. Life Cycle Cost Analysis of Solar Panels Installed in a Single-Family Home
4. Creating Calculation Models
5. A Written Report
6. Photovoice



Acknowledgments

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