# Manufacturing Curriculum:

## Contextualized Science Module

Supplemental Resources from the Adult Education Field

### Statewide Manufacturing Curriculum: Contextualized Science Module

For use with Outcomes #1, 2, 3, 4, 5, 6, 7, 8, 9, 10

The Science Module is great for the class. I use the Textbook and Workbook for teaching and doing any of the experiments. Here is all of the information for ordering each Title.

Physics: Concepts and Connections, 5/E Hobson

ISBN-10: 0321661133 • ISBN-13: 9780321661135 ©2010 • Paper, 496 pp

Laboratory Manual for Liberal Arts Physics, 2/E Hobson, Baehr & Swallow

ISBN-10: 0131011073 • ISBN-13: 9780131011076 ©2007 • Paper, 272 pp

I have included a list of materials you can order to do the various experiments in class. I ordered materials for three groups of three through the American Science and Surplus Website and Walmart.com and we spent about \$500 dollars.

Submitted by William G. Kuban, Prairie State College

#### **Science Project Equipment List**

#### Newton Lab

- 1. Dozen Golf Balls
- 2. Three Tennis Balls

#### Static Lab and Kinetic Lab

- 3. Six wooden Blocks
- 4. Three Eye Hooks
- 5. Three Spring Scales
- 6. Ball of String

#### Air Pressure Lab

- 7. Three Four ounce Glasses
- 8. 4X6 index cards
- 9. Three rectangular Bowls with sides 5" tall
- 10. Three Hot Plates
- 11. Three Pair Insulated Gloves for Heated objects

#### Work and Power Lab and Temperature Lab

12. Three Simple Meat Timer/Thermometers with Probes

#### Heats of Various Materials

13. Several Metal Specimens

#### Heat Engines and Refrigerators

- 14. Large Rubber Bands
- 15. Small Rubber Bands
- 16. Three Small Hairdryers
- 17. Rectangular Masses (steel or iron)

#### **Characteristics a Wave**

18.25" of Rope (inexpensive)

#### Series and Parallel Electrical Circuit Labs

19. Three Multi Meters
20. 100-200Ω Resistors
21. 500-1000Ω Resistors
22. Three 12-20 volt Power Supplies
23. Wires with Alligator clips