

# **Arcanum-Butler Ag Education & Multi-Purpose Facility**

## ***Frequently Asked Questions***

### **1. How will the building be used for the Ag Education classes? The greenhouse seems small, what is the size and how will it be used?**

Based off of current class offerings and current facilities we are not able to cover all content standards for those classes. With the new facilities we would be able to cover those content standards and offer new classes. The following will be added and/or covered appropriately in our current class offerings:

#### **Intro to Ag (8th Grade Course - 9 weeks)**

##### **Strand 5. Structural Engineering**

###### **Outcome: 5.6 Construction**

- Small Woodworking Projects
  - Measurement
  - Safety
  - Tool Use
  - Plan Reading

##### **Stand 8 Plant Science**

###### **Outcome: 8.4 Growth and Management**

- Greenhouse
  - Plant Growth
  - Plant Parts and Function

#### **Ag, Food, and Natural Resources (First Year Course)**

##### **Strand 2. Animal Science**

###### **Outcome: 2.3 Care and Management**

- Open Space for Labs
  - Ruminant Digestion Systems Dissection
  - Large Livestock Care

##### **Strand 4. Power Systems**

###### **Outcome: 4.1 Tool, Stationary and Mobile Equipment Maintenance**

- Tool Operation

###### **Outcome: 4.3 Engines**

- Small Engines
  - Use and Function
  - Troubleshooting and Care

##### **Strand 5. Structural Engineering**

###### **Outcome: 5.3 Design and Estimate**

- Reading Plans
- Preparing Projects

Outcome: 5.6 Construction

- Woodworking Projects
  - Measurement
  - Safety
  - Tool Use
  - Medium Wood Projects

Outcome: 5.10 Joining and Cutting Metal with Heat

- Welding and Cutting Concepts

Strand 8. Plant Science

Outcome: 8.1 Plant Nutrition

Outcome: 8.4 Growth and Management

- Greenhouse
  - Plant Propagation
  - Plant Nutrition
  - Plant Reproduction
  - Soils

## **Animal and Plant Science**

Strand 2. Animal Science

Outcome: 2.2 Body Systems

Outcome: 2.3 Care and Management

Outcome: 2.7 Animal Behavior

- Open Space for Labs
  - Body Systems Dissection
  - Large Livestock Care
  - Livestock Processing

Strand 8. Plant Science

Outcome: 8.1 Plant Nutrition

Outcome: 8.2 Plant Reproduction

Outcome: 8.3 Pest Management

Outcome 8.4 Growth and Management

- Greenhouse
  - Plant Propagation
  - Plant Nutrition
  - Plant Reproduction
  - Soils
  - Plant Growth Experiments
  - Hydroponics

Additional Items

- Construction and Mechanics
  - Build Hydroponics Tables
  - Construction of Livestock Equipment
  - Troubleshoot and Repair Plant Equipment (mowers, etc)

## **Ag Business**

Strand 1. Business Operations/21st Century Skills

Outcome: 1.7 Entrepreneurship/Entrepreneurs

- Product Development and Marketing
  - Design/Build/Market an Ag Product
    - Plant, Wood, Metal, etc

## **Livestock Selection, Nutrition and Management**

Strand 2. Animal Science

Outcome: 2.2 Body Systems

Outcome: 2.3 Care and Management

Outcome: 2.5 Animal Health

Outcome: 2.6 Population Management

Outcome: 2.7 Animal Behavior

- Open Space for Labs
  - Body Systems Dissection
  - Large Livestock Care
  - Livestock Processing
  - Artificial Insemination

Strand 7. Food Science

Outcome: 7.3 Meat Science

Outcome: 7.7 Biosecurity

- Meat Labs
- Biosecurity Labs

The following would be examples of new courses that can and will be offered once the new facilities are completed. Currently facilities do not allow for course to be offered.

## **Mechanical Principles**

Strand 4. Power Systems

Outcome: 4.1 Tool, Stationary and Mobile Equipment Maintenance

- Tool and Equipment Maintenance

Outcome: 4.2 Equipment Operations

- Tool and Equipment Use

Outcome: 4.3 Engines

Outcome: 4.4 Lubrication and Cooling Systems

Outcome: 4.5 Fuel, Air Induction and Exhaust Systems

Outcome: 4.11 Hydraulic Systems

- Two cycle and four cycle Engine operation, maintenance and troubleshooting
- Engine teardown and rebuild
- Hydraulic operations and principles

Strand 5. Structural Engineering

Outcome: 5.1 Electrical Theory

Outcome: 5.2 Structural Electrical Circuits

- Wiring Diagrams
- Install lighting fixture, wiring devices and equipment
- AC and DC Electrical Systems
- Multimeter Use

Outcome: 5.3 Design and Estimate

Outcome: 5.6 Construction

- Woodworking Projects
  - Measurement
  - Safety
  - Tool Use
  - Large Wood Projects
  - CNC Wood Engraving

Outcome: 5.8 Water Distribution Systems

- Supply and Drainage use and installation

Outcome: 5.9 Physics and Metallurgy of Welding

Outcome: 5.10 Joining and Cutting Metals with Heat

Outcome: 5.11 Fabricating with Cold Metals

- Arc Welding
- MIG Welding
- TIG Welding
- Oxy Fuel Torch Cutting
- Plasma Cutting
- CNC Plasma Cutting
- Fabricate Metal Projects
- Repair Metal Projects

## **Greenhouse and Nursery Management**

Strand 1. Business Operations/21st Century Skills

Outcome: 1.12 Site and Personal Safety

- Greenhouse Safety
  - Tools, Chemicals, Fertilizers, etc

Strand 5. Structural Engineering

Outcome 5.1 Electrical Theory

Outcome 5.2 Structural Circuits

- Greenhouse wiring
- Wiring Design, Loads, etc

Strand 6. Environmental Science

Outcome: 6.1 Soils

Outcome: 6.2 Water Quality

Outcome: 6.7 Solid Waste and Renewable

- Soils

- Composting
- Water quality

#### Strand 8. Plant Science

Outcome: 8.1 Plant Nutrition

Outcome: 8.2 Plant Reproduction

Outcome: 8.3 Pest Management

Outcome: 8.4 Growth and Management

Outcome: 8.5 Harvesting

Outcome: 8.6 Handling and Storage

- Greenhouse
  - Plant Nutrition Labs
  - Hydroponics
  - Plant Propagation
  - Seed Selection
  - Grafting, Cutting, and other Asexual Propagation
  - Weed Identification
  - Integrated Pest Management Plans
  - Manipulation of Plant Development

## **2. What is the need/purpose of the athletic portion of the facility?**

The multi-purpose athletic portion will have many uses. The facility will include an area for weights and workout equipment that will help diversify our physical education program. Students will be able to take strength training for physical education credit while other students will be able to take a course that focuses on lifelong activities, exercise and sports.

By allowing our weight room to be relocated to the new facility, the former weight room will provide a home to our wrestling program offered to middle and high school student athletes, which in turn removes the wrestling mats from being placed/stored in the elementary gym. With the wrestlers utilizing a new space, the elementary gym will now be available in the winter season for other programs including an active Arcanum youth boys and girls basketball program.

Additionally, the new facility which will include batting cages for softball and baseball will allow for both programs to have a designated area for hitting which in turn reduces the late evening practices while indoors. Currently, practices may last past 9:00 or more to allow both JV and Varsity softball and baseball programs sufficient time. Not only will both programs make use of the time during season, but off-season programming will be possible for those student athletes not involved in seasonal athletics.

Finally, the space can be utilized by any number of other athletic groups including our cheerleaders, flag corps, golfers and our growing indoor track and field participants.

**3. What are the different methods of giving? Is it too late to give since the dinner is over?**

It's not too late! We are making our final push to get our total to \$1 million for our fundraising campaign. Payments can be made in cash, check or by credit card. Donations can be made over a 3 year period also which allows families and businesses to spread the pledge out over time. We have also had people pledge an amount that they will give upon receipt of their tax refund or some in our farming community have pledged to donate late next fall or early winter towards the end of the year.

**4. What access will the community have to the building?**

Community access was an important consideration for the project. The Community Room will be made available for use by any organization or group within the Arcanum-Butler School district at no cost. The district is currently working with Edison State Community College to allow for college and/or adult education classes to be taught in the classrooms during evening hours. Additionally, the district is working on plans and procedures that would allow the community access to the multi-purpose athletic area for use of the equipment when not in use by the school.

**5. What is the square footage breakdown?**

The total square footage of the building is over 19,000 square feet, including the main building space, a building connector, a mezzanine level and a greenhouse. Over 6400 square feet is dedicated to the agriculture education space and nearly 2000 additional square footage will be utilized for the community room/classroom and an additional classroom. The multi-purpose athletic space square footage is just over 5600. The connector, restrooms, storage, mezzanine and office space make up the remaining square footage.

**6. What is the total cost of the building and how much are you trying to raise? How much do you have to-date?**

The total project cost is \$3.2 million dollars. The district is prepared to contribute over  $\frac{2}{3}$  of the project cost and has saved to do so. Through our Capital Campaign, we are looking to raise \$1 million to contribute to the project. As of April 1, we have raised nearly \$750,000 due to many generous donors!

**7. What is the cost breakdown of the project?**

The breakdown for the project includes hard costs such as general construction costs, site development, plumbing, electrical, technology, greenhouse, and a furniture allowance. It also includes soft costs which includes architect services, builder's risk insurance, construction testing, plan approval fees, etc...

Pictured below is a visual representation of the percentage breakdown costs. Costs are based on a preliminary budget.

- VoAg Space - \$900,000
- Community Rm. & Additional Classroom Space - \$770,000
- Multi-Purpose Athletic - \$765,000
- Site Development - \$240,000
- Soft Costs - \$225,000
- Restrooms/Storage/Offices - \$180,000
- Building Connector - \$80,000
- Furniture Allowance - \$60,000

### Agricultural Education & Multi-Purpose Facility - Cost Breakdown

