

Training the Next Generation:

Hands-on Learning Using the Campus Farm

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Delaware Valley College

- 1 hour north of Philadelphia in Doylestown (Bucks County) PA
- 1700 undergraduates



Del Val started as
“The National Farm School”

- Founded by Rabbi Joseph Krauskopf in 1896



Joseph Krauskopf



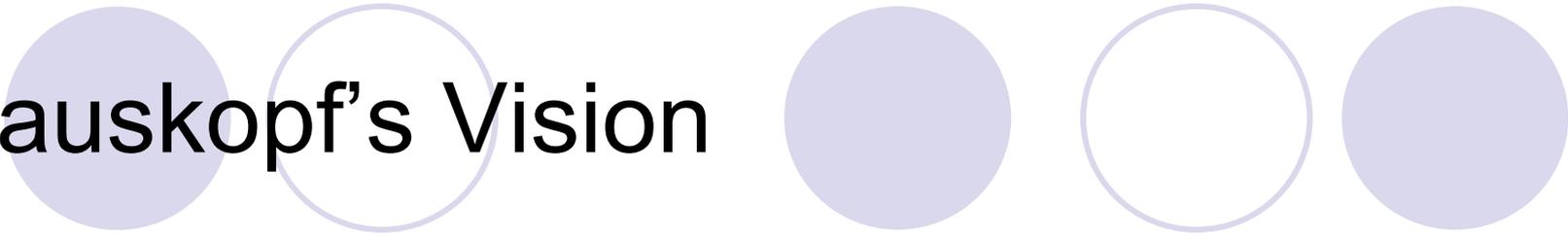
- Lived 1858-1923
- Born in Prussia but emigrated at 14 to the USA
- Well educated
- Moved to Philadelphia in 1887 to lead Keneseth Israel synagogue, which was to become one of the largest Jewish congregations in the United States



Russian Jewish immigration

- 1894 – immigration at it's peak
- Krauskopf traveled to Russia and viewed the Jewish Agricultural School at Odessa
- Met with Count Leo Tolstoy
- When he returned, he purchased 100 acres of land in Doylestown, PA and founded the “National Farm School”

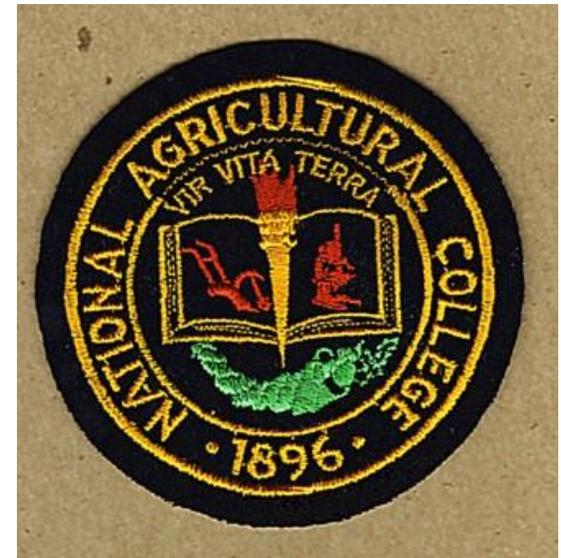
Krauskopf's Vision

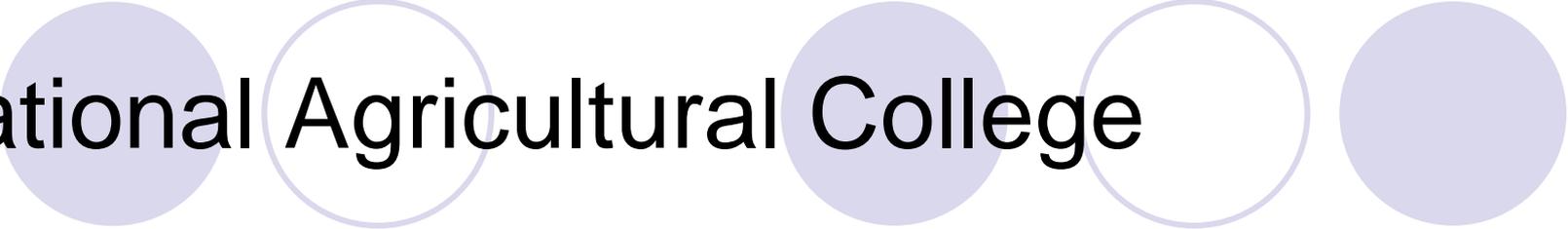


- “More tillers, not tailors”
- He wanted to shape the lives of young immigrants
 - Tuition and room & board were free
- The curriculum was based on a scientific approach to farming
- Open to youths of all faiths

The National Farm School

- In 1948 , it became the “National Agricultural College
- Academics + experience
- Students worked on the farm and took classes

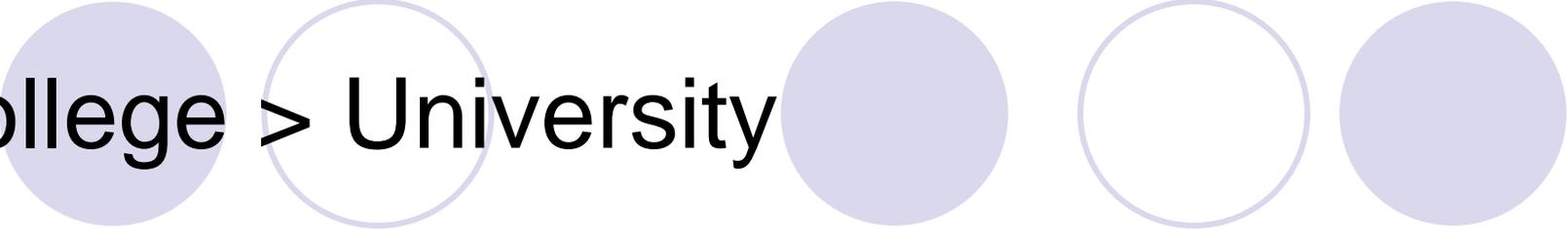




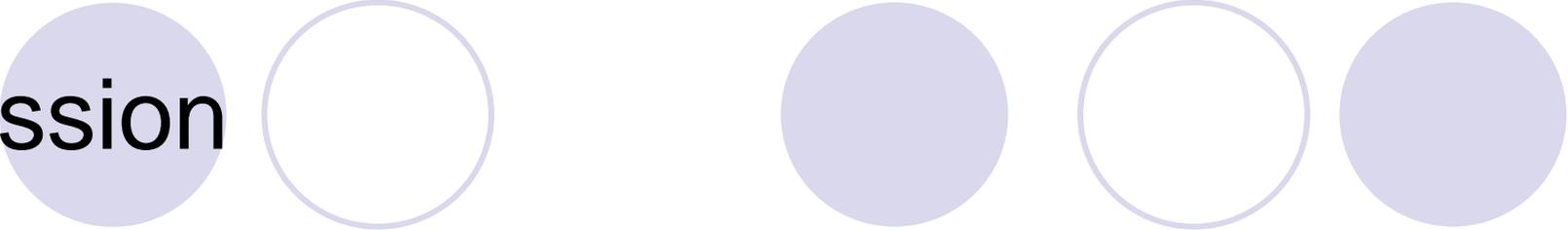
National Agricultural College

- Four year institution
- Programs added to the traditional agricultural offerings
- Enrollment grew; became co-ed
- 1960 – name changed to Delaware Valley College of Science and Agriculture
- Bachelors of Arts degrees added

College > University

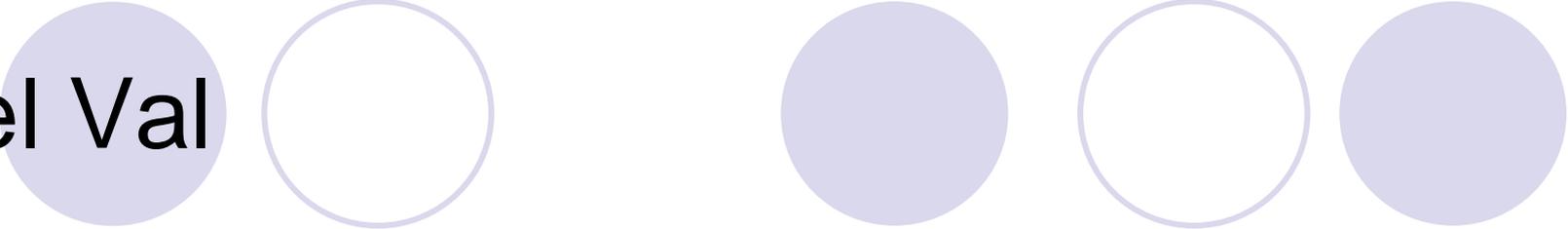


- 1989 – shortened to Delaware Valley College
- 1998 – first graduate program
- Present – College going for University status



Mission

- “The mission of DVC is to provide students with an opportunity to reach their highest potential and to acquire, in an intellectually stimulating environment, a quality education emphasizing hands-on experiential learning in agriculture...”



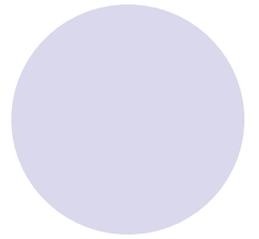
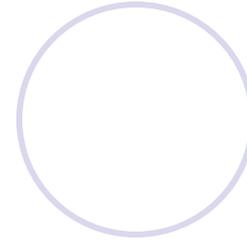
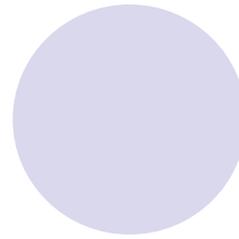
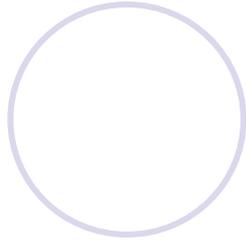
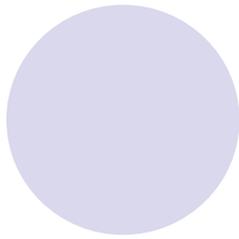
Del Val

- 1000 acres of land on 3 farms

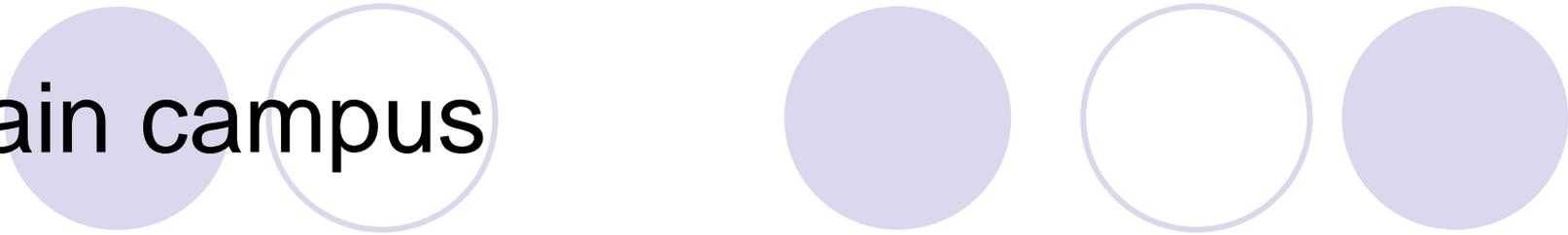
- Main Campus

- Roth Farm – about 30 minutes away in Montgomery County

- Gemmill Campus – about 15 minutes away in Bucks County

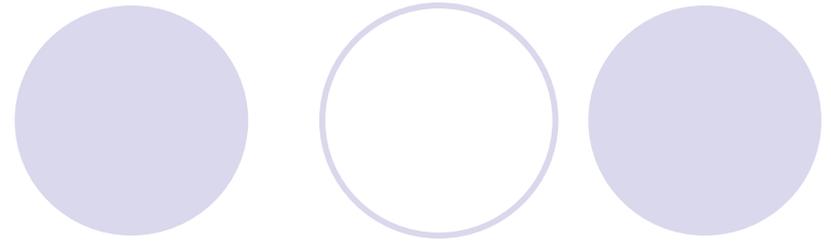


Main campus

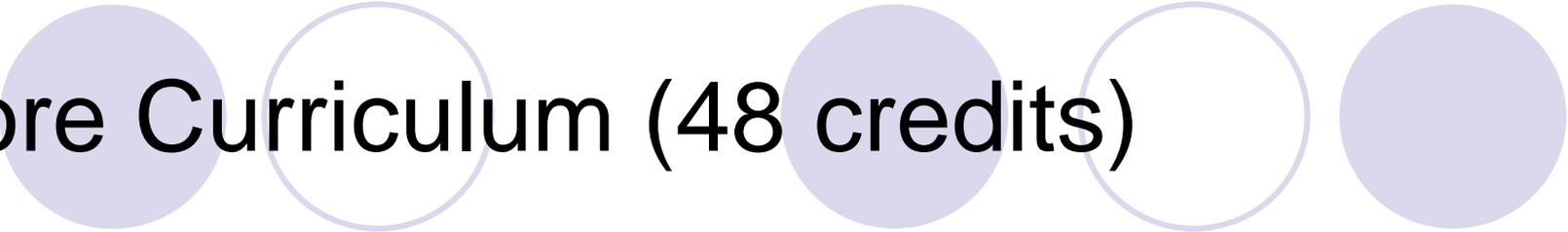


- 225 acres field crops
- 60 cow dairy; beef cattle; swine; goats
- Arboretum
- Breeding facility for 15 standardbred horses
- Riding ring and 40 horses for the equine program
- Greenhouses
 - Various ranges and uses

Horticultural land



- 60 acres of orchards and vegetable fields
 - apples, peaches, blackberries
- 2 High tunnels
 - Built by students



Core Curriculum (48 credits)

- Humanities (6 credits)
- Non-Western Societies
- Intro to the Fine Arts
- Macroeconomics
- Social Science Area
- English I
- English II
- Intro to Literature
- Bio Sci I
- Bio Sci II
- College Algebra
- Elementary Functions
- Speech
- Computers
- Phys Ed
- Skills for College Success
 - (critical thinking)

Horticulture Major Commercial Crop Production



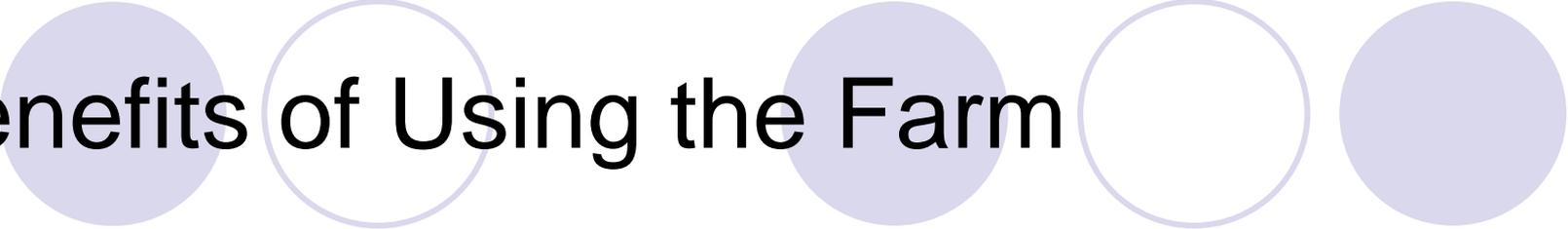
- 128 total credits required
- 4 credits for experiential learning (formerly known as the employment program)
- 48 core curriculum credits



Courses using the Farm

- Commercial Vegetable Production
- Organic Crop Science
- Horticulture Techniques I & II

- ** All of these classes have required readings, papers and presentations
- ** Papers registered with the “Writing Center”
- ** Discussion is encouraged!



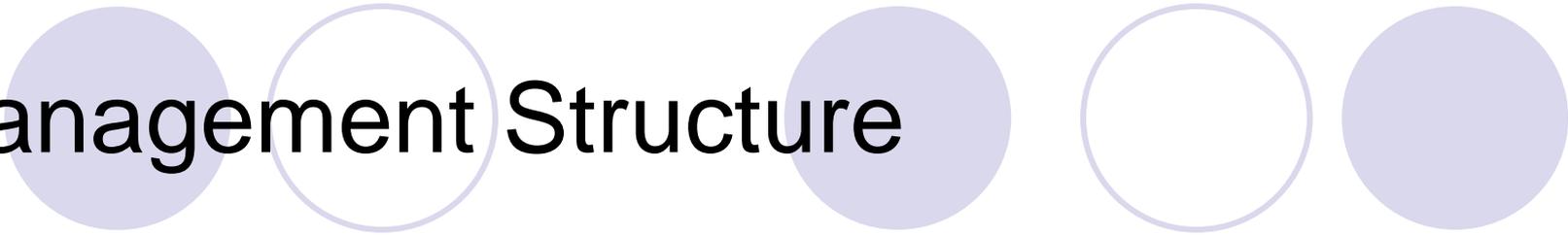
Benefits of Using the Farm

- Hands-on experiential learning
 - There is no substitute!
- Lectures prior to field labs provide background, instruction
- Active learning
 - Students are more engaged, less bored
 - Cannot text when tools are in their hands!

How using the farm is managed

- Requires planning
- Flexibility
 - Must have alternatives planned in case of weather
- Good communication
- The more going on at the farm, the easier it is to create learning experiences for the students

Management Structure



- Dean of Agriculture
- Faculty member
- Farm manager
- Assistant Farm manager
 - This is the key person who makes the labs happen
 - Purchases field supplies, tools, manages GH's during breaks

Seasonality

- Our students are in class
 - September-December
 - January – mid May
- Makes planning difficult
- Season extension structures a huge benefit



How we use our farm to teach at Del Val

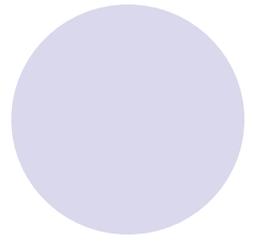
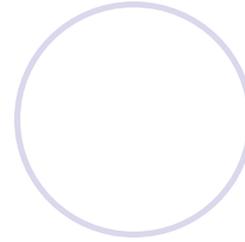
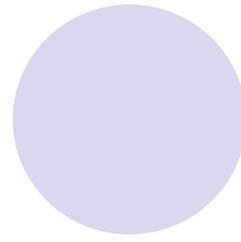
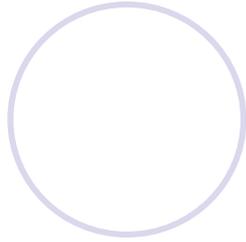
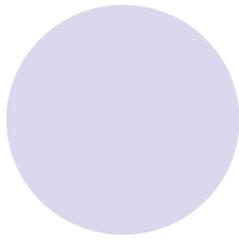


Planting plasticulture strawberries



Planting Cabbage Spring





Greenhouse Tomato Production

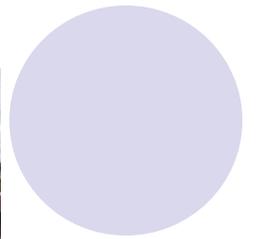


- Evaluate the GH
- Layout growing bags
- Seed tomatoes
- Plant tomatoes
- Fertilization
- Training and pruning

Farmer's Apprentice

- Loosely based on Donald Trump's "The Apprentice" 😊
- Each pair of students given 44 square feet of a raised bed to grow crops
- Yield competition
- Graded on record keeping





High Tunnel Cool Season Crops

Fall



High Tunnel Tomatoes Spring





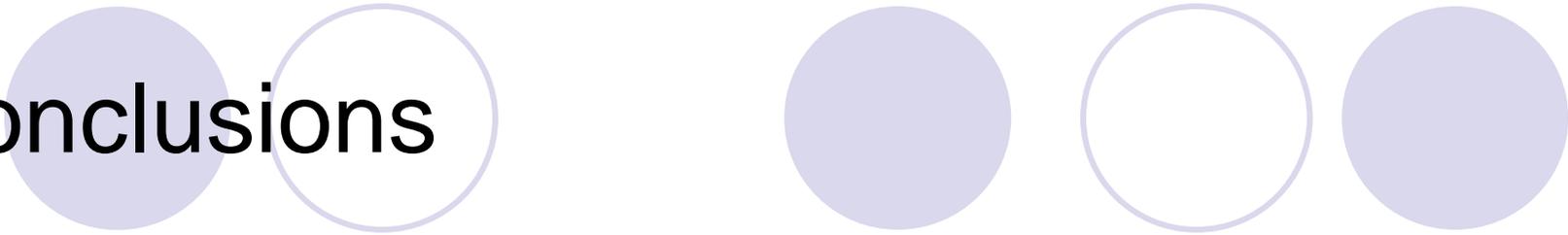
Building a high tunnel



Cider Pressing and Bottling

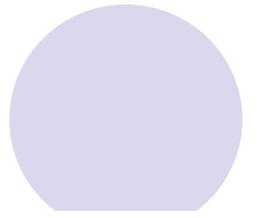
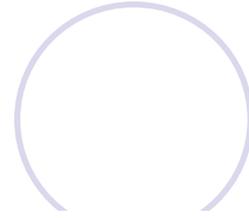
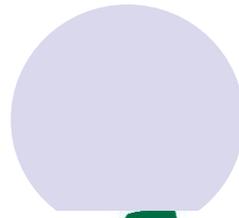
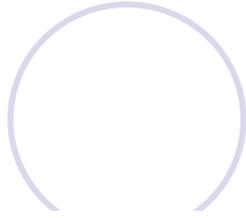
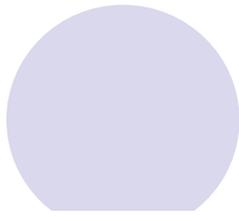






Conclusions

- Using the campus farm to teach agricultural production skills requires:
 - Planning
 - \$\$
 - Good management
- Hands-on teaching = experience
- The addition of a strong core curriculum prepares students for any type of career



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