Horticulture (BS)
Horticulture minor
Horticulture Major
Horticulture Minor

Response to Academic Budget Review Sub-committee Report
Presented by: Senator Carla Hagan
The new Horticulture B.S. is on the suspension list when other programs with similar status are on the probationary list?

- Deaf Studies, Fire Protection Safety & Engineering Technology, Global & International Affairs are all on the Probationary list (Reasons stated: Started 2011, new program, began 2008 respectively)
- Deaf Studies also has grant support
- Global and International Affairs also has data that suggest upward trend
- Physics (Reason: STEM discipline)

The new B.S. in Horticulture has been in place less years than these programs placed on the probationary list.

The new B.S. in Horticulture has strong grant support and has an expectation of increased grant support in the landscape/turf option.

The new B.S. in Horticulture’s data suggests an upward trend.

Horticulture is a STEM discipline and as such should be supported.
Budget - What does Horticulture cost EKU?
Horticulture Program facilities, equipment, and summer labor are supported thru...

- Kentucky’s Agriculture Initiative Funds: a $200,000/annual grant from our state government that resulted from the tobacco settlement monies and is to be utilized to support Agriculture laboratories.

- Kentucky Turfgrass Council has granted between $2200-10,000 per year to EKU for turfgrass and landscape laboratories and summer maintenance since 1998.

We only foresee these outside monies growing in coming years...

- EKU faculty has worked as a Board Advisor to the Kentucky Turfgrass Council in negotiations to combine their annual conference (100s of participants) with the Green Industry Expo (1000s of participants) and expects a large donation will result because of that. Conference scheduled for Oct. 20-21st

  http://gie-expo.com/gstmc

- The Fruit & Veggie program is now making a profit in sales. These profits go back into expansion of this program.
Industry support of Horticulture students is very strong

- Our students have been awarded scholarships from the Golf Course Superintendent’s Association of America, Sports Turf Manager’s Association of America, Kentucky Turfgrass Council, University Foundation Scholarships such as the Dwight G. Barkley Endowed (Endowed by the industry pays out $1000-2500/yr), Bige Isaacs Memorial Scholarship (EKU matched fund scholarship provided by Bluegrass Golf Course Superintendent’s Association, pays out $1000/semester) and community supported scholarships like the Madison County Garden Club Scholarships.

- In 2015-16 The Kentucky Turfgrass Council and the Ky Sports Turf Manager’s Association in coordination with EKU faculty created the A.J. Powell Jr. Student Development Initiative: awards full conference, travel, lodging and networking opportunities to deserving turfgrass students within Kentucky (A value of app. $2000/yr to our students). This tradition now continues at the Green Industry Expo in the 2016-17 year.

- Horticulture Students compete in the industry-hosted National Association of Landscape Professionals (NALP) collegiate competitions yearly. These competitions span landscape, turf, irrigation, interior plant care as well as number of other aspects of horticulture.
Why is industry support strong?

According to the U.S. Bureau of Labor Statistics, jobs in the landscape and turfgrass industry (Green Industry) are expected to rise:

- Landscape Management positions are expected to rise by 6% (as fast as average) from 2014 to 2024 with salary ranges from $38,000 to more than $65,000.

- Fruit and vegetable production management positions should rise by 15% (above average) from 2014 to 2024 with salary ranges from $35,000 to more than $48,000.

- Turfgrass management positions are expected to rise by 9% (above average) from 2014 to 2024 with salary ranges from $35,000 to more than $80,000. The average base salary (nationwide) for a golf course superintendent is $85,204 and $103,993 for a Certified Golf Course Superintendent, respectively (2015 figures from Golf Course Superintendent’s Association of America).
For the students who want to own their own businesses—the outlook is good as well...

- The national average salary of a small landscape business owner is $57,500 to more than $70,000 based on years’ experience.
- The national average salary of a small retail nursery business owner is $43,500 to more than $80,000.
- Feasibility studies show that approximately $45,000 to more than $60,000 can be made on just three acres of land annually with fruit and vegetable production.
Would eliminating faculty save money?...

- $54,377.00 + $23,992.52 = $78,369.52
  - Half-time Agriculture
  - Teaches the OHO 351 that must stay due to accreditation
  - Halving the salary = $39,184.76

- $55,350.00 + $22,974.08 = $78,324.98
  - Teaches courses that are taken as departmental electives by Agriculture students

- TOTAL HORTICULTURE PROGRAM SALARIES: $117,509.74
- We have 25 currently enrolled Horticulture B.S. students.
- Each student brings in $10,000/yr to the University = $250,000
- $250,000 income - $117,509.74 expenses = $132,490.26 University $$ gained thru faculty
- 35 students overall (see handout) $350,000 income - $117,509.74 expenses = $232,490.26 gained thru faculty
Eliminating Horticulture Courses and faculty...

- Would significantly weaken the EKU Agriculture Department
- There are only 7 full-time faculty in EKU Agriculture (one of which is the Chair and four are tenure-track). The loss of two solid faculty greatly reduces the quality of programs and would be too much for the department to sustain for long term growth.
- Political suicide! --In states ruled by agriculture economies public universities are expected to have quality agriculture programs. In KY this has been guaranteed by state government through providing the tobacco settlement monies. The tobacco settlement documents particularly notes “diversification” of agriculture (horticulture programs).
Factors that affected the decision to suspend (ABR)

1. Low enrollments persist even after the program was revised several years ago
2. Programs across the country are struggling to obtain students
3. UK has a strong program with multiple concentrations - hard for us to compete
4. University would need to retain course that supports the accredited PGM program
5. Program has considered suspending the BS in Horticulture and including horticulture as a concentration in the Agriculture degree
FACTOR 1. Low enrollments persist even after the program was revised several years ago--HISTORY

- The horticulture program employed **three** full-time faculty originally.
- The University approved the hiring of **one** faculty member after **two** horticulture faculty retired
University Requirement...................................................1 hour
BTO 100

General Education Requirements..................................................36 hours
Standard General Education program, excluding blocks IVA, IVB, VB, and VII (QS).

College Requirement........................................................1 hour
AGR 305 (1) and BTS 400 (CR).

Supporting Course Requirements..................................21 hours
BIO 121(4) and 131(4), CHE 101 and 107 (1); ACC 201, ECO 230; CCT 201, CIS 212, or CSC 104.

Free Electives....................................................................2 hours

Core..................................................................................41-44 hours
AGR 210(2), 213(4), 215, 304(4), 308, 315(2), 409, 411(1); OHO 131, 132(1), 349(4), 351(4),
7-10 hours of upper division electives from AGR and/or OHO electives, and one of the options:

Floriculture/Greenhouse Management Option..............18 hours
AGR 417; OHO 352(2), 362E(2), 364(2), 384 or 385, 388, and 389.

Landscape Horticulture Option..............................................18 hours
OHO 365, 366, 370, 371 or 372, 391 and 392.

Turfgrass Management Option..............................................18 hours
AGR 362(2), 416; OHO 301(1), 352(2), 354(2), 362A(1), 362G(1), 370, 410(2); and (1) hour OHO
and/or AGR upper division.

Total Curriculum Requirements.........................................120 hours
FACTOR 1. Low enrollments persist even after the program was revised several years ago—HISTORY

- Over the next few years two landscape faculty were hired that each taught a couple of years and left.
- The program was completely restructured in 2013-14 but with only one stable faculty in place.
  - A Horticulture Agribusiness option was included in the catalog description as with the intended staffing no additional faculty would be required.
  - The Floriculture/Greenhouse Management option was discontinued due to changes in the horticulture job market.
  - The Fruit and Vegetable Production option was CREATED due to changes in culture/public perception.
  - Landscape Horticulture was discontinued.
  - Landscape and Nursery option was CREATED due to changes in the horticulture job market.
  - Turfgrass Management was retained but with significant changes in course material due to changes in the industry and culture.
University Requirements/General Education ..........40 hours
BTO 100, Wellness, Writing Intensive Course, Standard General Education program
College Requirement.........................................................1 hour
AGR 305 (1) and BTS 400 (CR).

Supporting Course Requirements.........................9 hours *(GE-also fulfill General Education)*
BIO 111 or 112 (GE), BIO 318, CHE 101/101L (GE); CIS 212 or INF 104; ECO 120 (GE)

Free Electives.................................................................5-8 hours *(vary with option)*
Agribusiness Management (5), Fruit and Vegetable Production (6), Landscape Horticulture (8), Turfgrass Management (8)

Core Courses.................................................................29 hours
AGR 213, 215, 216 (1), 308, 409, 411(1); OHO 131, 132(1), 304(4), 349(4), 354, and one of the options:

Agribusiness Management........................................36 hours
ACC 201, AGR 310, 350, 440, 499 or 509; with advisor approval select nine hrs of courses in a horticulture specialty; select 12 hrs of upper level elective courses in AGR and/or OHO.

Fruit and Vegetable Production............................35 hours
AGR 340, 404, 416; OHO 301(2), 372, 373, 374, 375, 388, 499 or AGR 509; select six hrs of upper level elective courses in AGR and/or OHO.

Landscape and Nursery..............................................33 hours
OHO 351(4), 365(4), 370, 372, 388, 391(4), 392, 499; select six hrs of upper level elective courses in AGR and/or OHO.

Turfgrass Management..............................................33 hours
AGR 210(2), 362(2), 404, 416; OHO 301(1), 351(4), 353, 362G(1), 370, 498; select eight hrs of upper level elective courses in AGR and/or OHO.
FACTOR 1. Low enrollments persist even after the program was revised several years ago—POSITIVE GROWTH DEMONSTRATED

- New faculty was hired in August 2014 (red line on the graph below). The new program is still in its infantile stages yet the number of students has risen and graduation numbers are also expected to rise.*

![Degree Productivity (Major) graph](image)

*Numbers derived from current active advisees and their projected graduation dates. An increase in retention within the program raises the probability of advisees finishing the program.

**Projected graduation numbers for 2018-19 are not listed because historically the Horticulture program has larger numbers in transfer students (students that are not yet at EKU).
FACTOR 2: Programs across the country are struggling to obtain students

- Some programs across the country are struggling to obtain students but many have also not adapted their programs to the change in public perceptions regarding horticulture.
- Horticulture, as an industry, was formerly a purely aesthetic industry.

EKU restructured its horticulture programs in 2013-14 to meet changing perceptions and address popular culture.
The Fruit and Vegetable Production option was developed to address...

1. Sustainability
2. An understanding of the value of fresh food vs. processed foods in the American diet
3. An elimination of fresh food “deserts” (of which Eastern Kentucky is one)
The Landscape and Nursery concentration was created and the Turfgrass Management Curriculum changed to address...

1. Sustainability (less water use, less artificial inputs, scouting and integrated control of pests)

2. Human Health and Safety concerns of athletic green spaces: NFL concussion research has flooded popular press that improperly managed fields are dangerous to players. The explosion in field sports, such as soccer, has led to increased interest in athletic field care to reduce injuries of all kinds in children and adults, amateur and professional athletes.
Horticulture has more importance to our local community than graduating 10 students per year

- Promotes a healthy lifestyle through education and demonstration to numerous gardening groups, horticulture organizations, and, most recently, cooking clubs.
- Teaches EKU students service through hosting tours and STEM experiences for Kentucky school children.
- Produces fresh food for sale through the EKU Red Barn Garden.
- Provides fresh food deliveries to campus offices.
FACTOR 3: UK has a strong program with multiple concentrations—hard for us to compete

- Duplication of programs is a non-argument
- UK is known for extension (through extension faculty/staff) and research (faculty, technicians, graduate students) in Horticulture. They have one applied undergraduate program that appears to be an effort to duplicate EKU.
- EKU has a long term, outstanding reputation for quality horticulture undergraduates who are job-ready. EKU provides a hands-on, applied undergraduate program with lots of field work and internship credits.
  --Our specialized concentrations existed before theirs did
  --Historically our faculty helped guide the hiring of their faculty and creation of their older specialized concentrations
  --UK and EKU Horticulture attract two different types of students

In short, Horticulture experiences no more threat and likely less threat than other programs at EKU from UK’s close proximity. Our reputation exceeds UK’s in graduate quality in established horticulture areas.
FACTOR 4: University would need to retain the course that supports the accredited PGM program

- OHO 351 supports the accredited PGM program
FACTOR 5: Program has considered suspending the BS in Horticulture and including horticulture as a concentration in the Agriculture degree

- We haven’t done this prior because we worry about losing visibility. We try to think like busy 18 yr olds --they search programs via the internet with very limited search terms.

- However we do understand the need to streamline currently....
  
  The Horticulture faculty suggest inclusion under the Agriculture Degree as two separate concentrations...

  1. The Fruit & Veggie concentration with a more inclusive name that can still attracts students interested in Nursery/Greenhouse

  2. A Landscape and Turfgrass Management concentration

- These two concentrations follow the changing public perception of horticulture addressed earlier and retain the names that will allow us to get grants/donations in the respective programs.
University Requirements/General Education ............40 hours
BTO 100, Wellness, Writing Intensive Course, Standard General Education program

College Requirement ..........................................................1 hour
AGR 305 (1) and BTS 400 (CR).

Supporting Course Requirements ..................................5-9 hours (GE-also fulfill General Education)
BIO 111 or 112 (GE), BIO 318 (OHO concentrations), CHE 101/101L (GE); CIS 212 or INF 104; ECO 120 (GE)

Free Electives .................................................................6-8 hours (vary with option)
Fruit and Vegetable Production (6), Landscape and Turfgrass (8)

Core Courses ..................................................................30 hours
AGR 213(3), 215, 216(1), 308, 340, 409, 411(1), and two-three hours from AGR/OHO 301, 302(A F), or 349, AGR 130 & 131 or OHO 131 & 132, OHO 354 OR AGR 115, AGR/OHO 304 or AGR 125 and 126

Landscape and Turfgrass Management .........................33 hours
AGR 404 (3), 416 (3), OHO 349 (3), 351(4), 365(4), 370 (3), 391(4), 392 (3), 499 (3), select three hrs of upper level elective courses in AGR and/or OHO.

Fruit and Vegetable/Nursery/Greenhouse .......................35 hours
AGR 340, 404, 416; OHO 301(2), 372, 373, 374, 375, 388, 499 or AGR 509; select six hrs of upper level elective courses in AGR and/or OHO.

In conclusion EKU has a budget shortfall

- Eliminating Horticulture won’t help save EKU dollars and would do far more harm than it would do good.

- EKU Horticulture wants to help by...
  1. Continuing to bring in outside monies and making money for re-investment into the program.
  2. By streamlining the program into two Agriculture concentrations but retaining the names that will help us get students and outside dollars.
  3. Continuing to grow our new program through recruitment.