RED RAGE

PUNYA

Discussion #2

Undergraduate Major Student Learning Outcomes

ALL **Technical Competencies** (TC)

Detailed SLOs

Students will: plants, insects, microbes.

- Be able to identify key ~~pests~~ and beneficial species in agricultural, horticultural, and natural systems through laboratory and field methods
- Explain the biology and ecology of pests and beneficial species
- Explain the benefits and risks of management practices in agricultural, horticultural, and natural systems
- Implement cost effective, socially acceptable, and environmentally sound pest management solutions

Single SLO

Integrate skills and knowledge to solve problems related to ~~pests and beneficial~~ plant, insect, microbes organisms in agricultural, horticultural, and natural system

Example – why did an experiment fail?

ALL **Agricultural Literacy (AL)**

Detailed SLOs

- Explain and assess pest management policy, including regulatory frameworks
- Demonstrate knowledge of the important participants in agriculture and natural resource management
- Describe the similarities and differences among management of biological problems in agricultural, horticultural, and rangeland settings
- Develop coherent, objective, balanced arguments regarding contemporary problems in agricultural, horticultural, and natural systems

Single SLO

Formulate coherent, objective, balanced arguments regarding management of biological problems in agricultural, horticultural, and natural systems

BT **Critical Thinking (CT)**

Detailed SLOs

- Demonstrate ability to acquire knowledge about agricultural, horticultural, and natural systems and identify gaps and critical problems
- Integrate knowledge from across the curriculum
- Analyze qualitative and quantitative information and derive conclusions
- Synthesize knowledge to create novel ideas and solutions to complex problems

Single SLO

Describe, assess, analyze, and synthesize knowledge from across the curriculum to create solutions for pests and beneficial species in agricultural, horticultural, and natural systems.

at local & GPE are not mutually exclusi
global prominence

RR

Leadership (L)

Detailed SLOs

achieve desired outcomes

- Function effectively within diverse teams to solve complex problems ~~and achieve desired management outcomes~~ in agricultural, horticultural, and natural systems
- ~~Work~~ to create and facilitate inclusive and diverse teams
- ~~Promote and practice inclusion everywhere~~
- Provide leadership opportunities.

Single SLO

Promote and practice inclusion to form effective teams that solve complex problems in agricultural, horticultural, and natural systems

GTW

Communication (C)

Detailed SLOs

+

- Effectively communicate with ~~broad~~ and diverse* audiences including peers, stakeholders, and the public.
- Demonstrate the ability to effectively engage stakeholders to identify management needs
- Provide information related to sustainable** management in agricultural, horticultural and natural systems
- Excel in written and verbal communication of scientific results and analyses to diverse audiences*

Single SLO

Communicate effectively with broad and diverse audiences regarding sustainable management in agricultural, horticultural and natural systems

+ Real world problem where it is needed.

Rad - extra

Discussion #2

Undergraduate Major Student Learning Outcomes

Technical Competencies (TC)

Detailed SLOs

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- Implement cost effective, socially acceptable, and environmentally sound pest management solutions
- EXPERIMENTAL DESIGN

Single SLO

Integrate skills and knowledge to solve problems related to pests and beneficial organisms in agricultural, horticultural, and natural system

Agricultural Literacy (AL)

Detailed SLOs

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Single SLO

Describe, assess, analyze, and synthesize knowledge from across the curriculum to create solutions for pests and beneficial species in agricultural, horticultural, and natural systems.

Leadership (L)

Detailed SLOs

- Function effectively within diverse teams to solve complex problems and achieve desired ~~management~~ outcomes in agricultural, horticultural, and natural systems
- ~~Work to~~ create and facilitate inclusive and diverse teams
- ~~Promote and Practice inclusion everywhere~~

PROVIDE LEADERSHIP OPPORTUNITIES ~~TO ACHIEVE~~ (PROFESSIONAL

Single SLO WILL DEVELOP LEADERSHIP FOR LEADERSHIP TRAINING ORGANIZA, ON

Promote and practice inclusion to form effective teams that solve complex problems in agricultural, horticultural, and natural systems

SKILLS.

Communication (C)

Detailed SLOs

- Effectively communicate with broad and diverse* audiences including peers, stakeholders, and the public.
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Single SLO

Communicate effectively with broad and diverse audiences regarding sustainable management in agricultural, horticultural and natural systems

Blue Thinder

Discussion #2

Undergraduate Major Student Learning Outcomes

Technical Competencies (TC)

Detailed SLOs

Students will:

- Be able to identify key pests and beneficial species in agricultural, ~~horticultural,~~ and natural systems through laboratory and field methods
- Explain the biology and ecology of pests and beneficial species
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- Implement cost effective, socially acceptable, and environmentally sound pest management solutions

Single SLO

Integrate skills and knowledge to solve problems related to pests and beneficial organisms in agricultural, ~~horticultural~~, and natural system

Agricultural Literacy (AL)

Detailed SLOs

- Explain and assess pest management policy, including regulatory frameworks
- ~~Demonstrate knowledge of~~ the important participants in agriculture and natural resource management
- Describe the similarities and differences among management of biological problems in agricultural, ~~horticultural, and rangeland settings~~
- Develop ~~coherent,~~ objective, balanced arguments regarding ~~contemporary~~ problems in agricultural, ~~horticultural,~~ and natural ~~systems~~

Single SLO

Formulate ~~coherent,~~ objective, balanced arguments regarding management of biological problems in agricultural, ~~horticultural~~, and natural systems

Critical Thinking (CT)

Detailed SLOs

- Demonstrate ability to acquire knowledge about agricultural, ~~horticultural, and~~ natural systems and identify gaps and critical problems
- Integrate knowledge from across the curriculum
- Analyze qualitative and quantitative information and derive conclusions
- Synthesize knowledge to create novel ideas and solutions to complex problems

Single SLO

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Leadership (L)

Detailed SLOs

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Single SLO

Promote and practice inclusion to form effective teams that solve complex problems in agricultural, horticultural, and natural systems

Communication (C)

Detailed SLOs

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BLUE

Blue Thunder

Technical Competencies

3. What does it mean to identify? → take horticultural and replace with managed.
   ~~Where~~ where to go? or know actual species?
   - change wording to ~~How~~ Apply knowledge to integrate multiple method to identify...

2) Fine

3) ...agricultural, natural & Managed systems?
   need to word smith → take Horticulture out

4) Ask the question "What is socially acceptable
   - Identify ~~Horticulture~~ and implement.....
   - ~~Beetle ID Identify~~

Tree Health Management: Integrating multiple

~~Pathogen~~

A2

1) Fine
2) Change to: Identify participants and their roles in ~~important knowledge~~ "~~participants~~"
   demonstrate the importance of
3) remove horticultural
   & change to → ag, natural, and managed

④ remove coherent → logical
→ change to ~~historically defined~~ historical & contemporary

change to ag, natural & managed. contemporary ecosystems

⑤

① ag, natural, & managed

② Fire

③ Fire

④ What is novel?

Remove novel.

CDA Control a species

lower level Bloom's. Consider Understand

Team Green

Discussion #2

Undergraduate Major Student Learning Outcomes

at top, so as not

Technical Competencies (TC)
Detailed SLOs
Students will: ~~apply~~ important current technologies

- Be able to identify key pests and beneficial species in agricultural, horticultural, and natural systems ~~through laboratory and field methods~~
- Explain the biology and ecology of pests and beneficial species
- Explain the benefits and risks of management practices in agricultural, horticultural, and natural systems
- Implement cost effective, socially acceptable, and environmentally sound pest management solutions
- Agri-tek aspect: apply ~~Understand~~ ~~real biology tools~~ current technologies to id + manage P + D sp.

Single SLO
Integrate skills and knowledge to solve problems related to pests and beneficial organisms in agricultural, horticultural, and natural system

Agricultural Literacy (AL)
Detailed SLOs

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Critical Thinking (CT)
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Single SLO
Describe, assess, analyze, and synthesize knowledge from across the curriculum to create solutions for pests and beneficial species in agricultural, horticultural, and natural systems.

Leadership (L)

Detailed SLOs

- Function effectively within diverse teams to solve complex problems and achieve desired management outcomes in agricultural, horticultural, and natural systems
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Single SLO

Promote and practice inclusion to form effective teams that solve complex problems in agricultural, horticultural, and natural systems

Communication (C)

Detailed SLOs

Combine

- Effective communicate with ~~broad and~~ diverse* audiences including peers, stakeholders, and the public, + the media
- Demonstrate the ability to effectively engage stakeholders to identify management needs
- Provide information related to sustainable** management in agricultural, horticultural and natural systems
- Excel in written and verbal communication of scientific results and analyses to diverse audiences*

Single SLO

Communicate effectively with ~~broad and~~ diverse audiences regarding sustainable management in agricultural, horticultural and natural systems

Red. (Jan)

Discussion #1

Mission of the Major

To ~~understand~~ the biology ~~and~~ ecology of ~~pests~~ and beneficial species

Desired Features of the Major

Students want flexibility and to keep their options open

- ~~Minimize~~ credits to ~~allow~~ students to pursue additional interests and not close doors by choosing this major
- Self-designed concentration to allow flexibility

Underlying Assumptions about the Major

- The major will ~~train~~ students broadly, ~~not in specific areas such as~~ entomology, plant pathology, ~~or~~ weed science
- This broad training will provide the foundation for graduate or workplace training.
- Methods taught and information conveyed will be up-to-date and cutting edge

*Diverse groups and audiences include, but are not limited to, persons of different ages, educational, cultural, and experiential backgrounds, races, ethnicities, and sexual orientations.

** Sustainable means considering social, economic and biophysical aspects

(Jan

Red

Mission Strengths

To ~~Instill~~ Knowledge of integrate the biology, ecology, & management of plants, insects, & microbes in ag & natural systems .... To translate

Features (need 27

Core of science + soft skills

~~Maximum~~ Limited Core credits to encourage students ... >

Assumptions

Red_ extra

PUNYA AFNAN

Discussion #1

Mission of the Major

To understand the biology and ecology of pests and beneficial species

Desired Features of the Major

Students want flexibility and to keep their options open

- Minimum credits to allow students to pursue additional interests and not close doors by choosing this major
- Self-designed concentration to allow flexibility
- PREP FOR GRADUATE SCHOOL

Underlying Assumptions about the Major

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Green (Andrew)

action

add applied & agricultural

Discussion #1

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Team Green

- What is name?
- What is broadly trained? What careers are we training students for?

- Is the mission too broad? Pests + beneficial species covers all organisms on the planet.
- Will there be tracks?

Mission

- Needs to reference plant health, Ag or natural resources (not medicine or all aspects of biology
- Lou likes mission statement as is.

Features:

- employability
- Internships / Active learning / practicums
- Training for graduate study

Green (Amy)

learn to apply

Discussion #1

brief, which is good

Mission of the Major

To understand the biology and ecology of pests and beneficial species important for agric., etc.

Desired Features of the Major encourage

Students want flexibility and to keep their options open

- Minimum credits to ~~allow~~ students to pursue additional interests and not close doors by choosing this major
- Self-designed concentration to allow flexibility
- internship or lab experience
- employability
- core classes

Underlying Assumptions about the Major

- The major will ~~train~~ educate students broadly, not in specific areas such as entomology, plant pathology, and/or weed science.
- This broad training will provide the foundation for graduate or workplace training.
- Methods taught and information conveyed will be up-to-date and cutting edge

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which jobs?

To apply biology & ecology to improve food, fiber, fuel production & health of natural systems

* How do students market themselves

To learn to apply biological knowledge to improve ag. & nat systems

our

Blue Thunder

To train leaders

pathogen

natural & Agricultural systems

Discussion #1

Mission of the Major

To understand the biology and ecology of pests and beneficial species

To train leaders in the biology and ecology of pests and beneficial species in Agricultural and Natural ecosystems.

Desired Features of the Major

Students want flexibility and to keep their options open

- Minimum credits to allow students to pursue additional interests and not close doors by choosing this major
- Self-designed concentration to allow flexibility → with some guidance → focus.

Balance ↓ want structure.

with coordinator w/ career objectives.

Underlying Assumptions about the Major

- The major will train students broadly, not in specific areas such as entomology, plant pathology, or weed science.
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- real life skill.
- 40 hrs.

what am I? Ag biologist?

None that other places have too

"Forest Health specialist" → know all these distinct things.

- Ecosystem Health specialist.
- Agroecologist

Discussion #1 Undergrad Major

Blue Thunder

Mission of the Major

- Not overly sexy
- Pathogens included in pests?
- Does the word ag need to be here?
- Rest of humans? Ecosystem
- "To understand the biology and ecology of pests and beneficial species "in ~~the~~ agricultural & natural ecosystems"?
- "To train leaders in"

Desired Features of the Major

- Keep flexibility, yet educate for our Major!
- Reinforce themes in classes.
- Desired features

Underlying Assumptions about the Major

- Ag Biologist / Agro Ecologist

application

Discussion #1

food safety, security sustainability

Mission of the Major

To understand the biology and ecology of pests and beneficial species

employability

Desired Features of the Major

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- Self-designed concentration to allow flexibility

internship

Underlying Assumptions about the Major

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