MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Dr. Melanie Autin
Dr. Simran Banga
Dr. Royhan Gani
Dr. Ting-Hui Lee
Dr. Andy Mienaltowski
Dr. Hope Marchionda
Dr. Todd Willian
Dr. Zhonghang Xia
Dr. Bangbo Yan

FROM: Dr. Stuart Burris, Chair

SUBJECT: Agenda for <u>Thursday, October 2, 2025</u>

A. OLD BUSINESS:

I. Consideration of the minutes of the September 2025 meeting.

B. NEW BUSINESS:

Type of item	Description of Item & Contact Information
Informational	**<u>The following items were sent through the expedited process</u>** Prefix Changes: AGRO 351, AGRO 359, AGMC 371, AGMC 372, AGMC 373, AGMC 374, AGMC 377, AGMC 378, AGMC 425 Deletions: AGRO 111, AGRO 421, AGMC 270, AGMC 271, AGMC 272, AGMC 273
Action	**Proposal to Make Multiple Revisions to a Course** AGMC 170, Introduction to Agricultural Mechanization, 3 hrs. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGMC 170, Introduction to Agricultural Mechanization, 3 hrs. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGMC 475, Selected Topics in Agriculture, 3 hrs. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 310, Pest Management, 3 hrs. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 320, Crop Physiology, 3 hrs. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151

Action	**Proposal to Make Multiple Revisions to a Course** AGRO 350, Soils 3 hrs. Contact: Becky Gilfillen, becky.gilfillen@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 352, Spil Fertility and Fertilizers 3 hrs. Contact: Becky Gilfillen, becky.gilfillen@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 409: Weed Science, 3 hrs. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 410, Weed Science Laboratory, 1 hr. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 422: Field Crops, 3 hrs. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 452: Soil Microbiology, 3 hrs. Contact: Becky Gilfillen, becky.gilfillen@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 457, Soil Formation, Classification and Mapping, 3 hrs. Contact: Becky Gilfillen, becky.gilfillen@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 458, Soil Formation, Classification and Mapping Lab, 1 hr. Contact: Becky Gilfillen, becky.gilfillen@wku.edu, 270-745-3151
Action	**Proposal to Make Multiple Revisions to a Course** AGRO 475, Selected Topics in Agriculture, 3 hrs. Contact: Todd Willian, todd.willian@wku.edu, 270-745-3151
Action	**Proposal to Make a Program Revision** Ref. 525: Biology, Bachelor of Science Contact: Simran Banga, Simran.banga@wku.edu, 270-745-4748

C. OTHER BUSINESS

Minutes – OCSE Curriculum Committee **September 2025**

Members Present:
Dr. Melanie Autin, Dr. Simran Banga, Dr. Royhan Gani, Dr. Ting-Hui Lee, Dr. Andy Mienaltowski, Dr. Hope Marchionda, Dr. Todd Willian, Dr. Zhonghang Xia, Dr. Bangbo yan
Guests Present:
Dr. Cate Webb, Dr. Kristina Arnold, Dr. Ali Er

FROM: Dr. Stuart Burris, Chair

The meeting was called to order at 4:00pm.

OLD BUSINESS:

Minutes from the May 2025 meeting were approved as posted.

NEW BUSINESS:

Action Agenda:
BDAS 321: Autin/Mienaltowski; Approved with friendly amendment
Ref. 329: Marchionda/Autin; Approved with friendly amendment

Other Business:
None

Adjourned at 4:23pm

Course Change Request

Date Submitted: 09/18/25 3:29 pm

Viewing: **AGSY ~~AGMC~~ 170 : Applied Agricultural Technologies ~~Introduction to Agricultural Mechanization~~**

Also listed as: ~~**AGMC 170**~~

Formerly known as: **AGMC 170**

Last approved: 10/29/23 3:18 am

Last revision: 09/18/25 3:29 pm

Changes proposed by: wll99339

In Workflow

1. AGRI Approval
2. SC Dean
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:28 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Oct 29, 2023 by William Willian (todd.willian)

Catalog Pages referencing this course

AGMC 170:
Agricultural Mechanics (AGMC)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	(270) 745-3151

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	AGSY - Agriculture Systems ~~AGMC - Agricultural Mechanics~~	Course number	170
Department	Agriculture		

College Science and Engineering

Course title
Applied Agricultural Technologies ~~Introduction to Agricultural Mechanization~~

Abbreviated course title APPLIED AGRIC TECHNOLOGies ~~INTRO AGRI MECHANIZATION~~

Course description
The topics studied in this course will be electrical power, land surveying and building construction.

Credit hours 2

Repeatable
Yes
Number of repeats 2
For maximum credits 2

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture

CIP Code 010201 - Agricultural Mechanization, General.

Does this course have prerequisites

No

Corequisites
AGMC 171 - Applied Agricultural Technologies Laboratory

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

All courses with AGMC prefix are being changed to AGSY to better reflect the technology inherent in the discipline. Title change better reflects ~~Addition of~~ course content. ~~objectives and course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Describe an overview of the field of agriculture mechanics, its importance in modern agriculture, and its role in increasing efficiency and productivity.
2	Interpret electrical systems in agriculture, including wiring, electrical components, and safety precautions when working with electrical equipment.
3	Illustrate the concept of precision agriculture and its role in modern farming, including the use of GPS technology, sensors, and data analysis in optimizing farm operations.
4	Explain basic surveying methods and practices and basic construction tasks.

Content outline

#	Topic
1	I. Introduction to Agricultural Mechanics II. Safety Considerations and Practices III. Basic Electrical Principles and Concepts IV. Surveying V. Contruction VI. Precision Agriculture and its Applications

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 202

Course Change Request

Date Submitted: 09/18/25 3:29 pm

Viewing: AGSY ~~AGMC~~ 171 : Applied ~~Introduction to~~ Agricultural Technologies ~~Mechanization~~ Laboratory

Also listed as: ~~AGMC 171~~

Formerly known as: AGMC 171

Last approved: 10/29/23 3:18 am

Last revision: 09/18/25 3:29 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGMC 171:
Agricultural Mechanics (AGMC)

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:29 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Oct 29, 2023 by William Willian (todd.willian)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	(270) 745-3151

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	AGSY - Agriculture Systems ~~AGMC - Agricultural Mechanics~~	Course number	171
Department	Agriculture		

College Science and Engineering

Course title
Applied ~~Introduction to~~ Agricultural Technologies ~~Mechanization~~ Laboratory

Abbreviated course title APPLIED AGRIC TECHnologies lab ~~INTRO AGRI MECH LAB~~

Course description
A laboratory course correlated with AGMC 170.

Credit hours 1

Repeatable
Yes
Number of repeats 2
For maximum credits 1

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lab

CIP Code 010201 - Agricultural Mechanization, General.

Does this course have prerequisites

No

Corequisites
AGMC 170 - Applied Agricultural Technologies

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

All courses with AGMC prefix are being changed to AGSY to better reflect the technology inherent in the discipline. Title change better reflects course content. ~~Addition of course objectives and a course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Develop an understanding of basic electricity concepts and wiring.
2	Demonstrate basic construction techniques.
3	Demonstrate basic surveying and its applications.
4	Explain precision agriculture techniques via utilization of precision equipment and software.

Content outline

#	Topic
1	I. Introduction and Safety Considerations II. Basic Electrical Wiring III. Surveying IV. Construction Techniques and Methods V. Precision Agriculture Demonstrations

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 203

Course Change Request

Date Submitted: 09/18/25 3:36 pm

Viewing: AGSY ~~AGMC~~ 475 : Selected Topics in Agriculture Systems

Also listed as: ~~AGMC 475~~

Formerly known as: AGMC 475

Last approved: 10/29/23 3:18 am

Last revision: 09/18/25 3:36 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGMC 475:
Agricultural Mechanics (AGMC)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	(270) 745-5969

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	AGSY - Agriculture Systems ~~AGMC - Agricultural Mechanics~~	Course number	475
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:28 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Oct 29, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title
Selected Topics in Agriculture Systems

Abbreviated course title SELECTED TOPICS IN AG systems ~~AGRICULTURE~~

Course description
Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture systems. ~~agriculture.~~ Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content. Note: Consent of instructor required.

Credit hours 3

Repeatable
Yes
Number of repeats 2 ~~99~~

For maximum credits 6 ~~999~~

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture

CIP Code 010201 - Agricultural Mechanization, General.

Does this course have prerequisites

No

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Title and prefix changes better reflect the technology inherent in the discipline. ~~Addition of learning objectives and course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Identify, discuss and interpret topical areas within the field of agronomy. Topics of study vary within the broad range of agronomic disciplines.

Content outline

#	Topic
1	- Introduction of topical area - discussion of topical area and its respective sub-categories or sub-disciplines - evaluation of student learning

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 238

Course Change Request

Date Submitted: 09/21/25 4:59 pm

Viewing: PLSS ~~AGRO~~ 310 : Integrated Pest Management

Also listed as: ~~AGRO 310~~

Formerly known as: AGRO 310

Last approved: 09/27/23 3:16 am

Last revision: 09/21/25 4:59 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 310:
Agronomy (AGRO)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	270-745-5969

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	310
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:28 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title
Integrated Pest Management

Abbreviated course title INTEGRATED PEST MANAGEMENT

Course description
Identification and management of insects, diseases and weeds of major importance in agronomic crops, turfgrasses and landscape plantings.

Credit hours 3

Repeatable
Yes
Number of repeats 2
For maximum credits 3

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture
Lecture/Lab

CIP Code 011105 - Plant Protection and Integrated Pest Management.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		AGRO 110	D	UG		No
And		CHEM 105	D	UG		No

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

The PLSS prefix was created to combine HORT and AGRO courses into one, simplifying course selection for students. Additionally, the title change is more descriptive of course content. A lecture/lab format will provide more opportunities for experiential learning. ~~To add the course objectives and course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Recognize the characteristics and agronomic impact of insects.
2	Examine various methods of insect pest control including mechanical, biological, chemical and cultural methods.
3	Examine weed species and their management via biological, cultural, mechanical, and chemical means.
4	Recognize various types of pathogens, the disease cycle, and crop disease management.

#	Student Learning Outcomes
5	Interpret the laws and regulations governing pesticide labeling, storage and handling, safety, and application.

Content outline

#	Topic
1	I. Introduction II. Insect Structures & Life Processes III. Insect Classification & Life Cycles IV. Insect Ecology V. Economic Decision Levels and Insect Pest Management VI. Weeds & Their Management VII. Vertebrate Pests VIII. Plant Pathogens & Their Management IX. Pesticide Safety X. Environmental Fate of Pesticides XI. Pesticide Laws, Regulation and Record-keeping

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

None.

Additional information

Supporting documentation

Reviewer Comments

Key: 278

Course Change Request

Date Submitted: 09/21/25 5:00 pm

Viewing: PLSS ~~AGRO~~ 320 : Environmental Plant ~~Crop~~ Physiology

Also listed as: ~~AGRO 320~~

Formerly known as: AGRO 320

Last approved: 09/27/23 3:16 am

Last revision: 09/21/25 5:00 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 320:
Agronomy (AGRO)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	(270) 745-5969

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	320
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:28 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title
Environmental Plant ~~Crop~~ Physiology

Abbreviated course title ENVIRONMENTAL PLANT ~~CROP~~ PHYSIOLOGY

Course description
Effects of various physiological and environmental factors on crop production are discussed.

Credit hours 3

Repeatable
Yes
Number of repeats 2
For maximum credits 3

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture

CIP Code 010304 - Crop Production.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		AGRO 110	D	UG		
And		BIOL 120	D	UG		
And	(	CHEM 105	D	UG		
Or		CHEM 120	D	UG	)	

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Combining AGRO and HORT prefixes into PLSS simplifies course selections for students. Title change better describes course content. ~~Addition of SLO's and Course Outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Describe the processes of photosynthesis, respiration and photo-respiration and the influence of their respective efficiency upon crop growth and yield.
2	Describe the role of plant hormones in crop growth and development.

#	Student Learning Outcomes
3	Identify the role of essential nutrients in growth, maintenance and development of higher plants.
4	Relate various physiological principles to crop growth, development, and yield.

Content outline

#	Topic
1	1Course introduction and Review of plant cells, macromolecules, and plant terminology 2 Water and plant cells 3 Water balance of plants 4 Mineral nutrition 5 Solute transport 6 Light reactions 7 Carbon reactions 8 Physiological and ecological considerations of photosynthesis 9 Respiration and metabolism 10 Translocation 11 Growth and development 12 Auxin and Gibberellins 13 Cytokinins, Ethylene, Abscisic Acid 14 Stress Physiology and Yield

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Course Change Request

Date Submitted: 09/21/25 5:00 pm

Viewing: PLSS ~~AGRO~~ 350 : Introductory Soils

Also listed as: ~~AGRO 350~~

Formerly known as: AGRO 350

Last approved: 09/27/23 3:16 am

Last revision: 09/21/25 5:00 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 350:
Agricultural Mechanics (AGMC)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Becky Gilfillen	becky.gilfillen@wku.edu	(270) 745-3151

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	350
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:28 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title
Introductory Soils

Abbreviated course title INTRODUCTORY SOILS

Course description
A basic study of soil properties and processes emphasizing soil management and its application to agriculture.

Credit hours 3

Repeatable
Yes
Number of repeats 2
For maximum credits 3

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture

CIP Code 011201 - Soil Science and Agronomy, General.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
	(	CHEM 105	D	UG		
And		CHEM 106	D	UG	)	
Or	(	CHEM 120	D	UG		
And		CHEM 121	D	UG	)	

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Combining HORT and AGRO prefixes into PLSS simplifies course selections for students. Title change better describes course content. ~~Addition of SLO's and Course Outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Define the basic physical properties of a soil and how those relate to agricultural production. Examples include soil conservation, water holding capacity, water movement, etc.
2	Define the basic chemical properties of soil and how they relate to agricultural production. Examples include soil fertility, soil pH, etc.

#	Student Learning Outcomes
3	Define the basic biological properties of a soil and how those relate to agricultural production. Examples include organic matter, microorganisms, composting, etc.

Content outline

#	Topic
1	I Introduction to Soils -Major functions of soils -Overall soil components -General physical properties: color, texture & structure -Soil developmental processes II Soil Development Systems -Landscapes and profiles -Factors of soil formation -Soil classification systems III Soil Physical Properties -Soil density terminology -Bulk density, particle density, and porosity -Porosity management -Compaction, tillage, and seedbed properties

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Course Change Request

Date Submitted: 09/21/25 5:01 pm

Viewing: **PLSS ~~AGRO~~ 352 : Nutrient Management ~~Soil Fertility and Fertilizers~~**

Also listed as: ~~**AGRO 352**~~

Formerly known as: **AGRO 352**

Last approved: 09/27/23 3:17 am

Last revision: 09/21/25 5:01 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 352:
Agronomy (AGRO)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Becky Gilfillen	becky.gilfillen@wku.edu	(270) 745-5970

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	352
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:28 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title

Nutrient Management ~~Soil Fertility and Fertilizers~~

Abbreviated course title NUTRIENT MANAGEMENT ~~SOIL FERTILITY/FERTLIZER~~

Course description

Soil reactions of elements essential for plant growth and development, sources and manufacture of fertilizer materials, use of fertilizers and lime, use of sound management practices are stressed.

Credit hours 3

Repeatable

Yes

Number of repeats 2

For maximum credits 3

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type

Lecture

CIP Code 011202 - Soil Chemistry and Physics.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		AGRO 350	D	UG		No
And		AGRO 110	D	UG		No

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Combining HORT and AGRO prefixes into PLSS simplifies course selections for students. Title change better describes course content. ~~To add course objectives and a course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Recognize nutrients required for plant growth, relative amount present in each plant, what fertilizer forms are used to provide these nutrients, and determine how much of each nutrient is needed.
2	Describe why soil pH is important, how we are able to change the pH and determine the amount of lime/acid needed to obtain the correct pH.
3	Collect a field-scale soil sample, interpret a soil test report and select recommendations for the producer/landowner.

Content outline

#	Topic
1	I Introduction and Course Overview II Colloids and Cation Exchange Capacity Review III Soil Acidity and Basicity -soil acidity -concept of soil as a buffer -active vs. potential acidity -pH for crop production -liming materials -saline and sodic soils IV Soil Sampling -purpose -procedure -timing -new technologies V Factors Affecting Plant Growth -elements required in plant nutrition -function of macronutrients -function of micronutrients VI Soil Plant Relationships -ion exchange -movement of ions -ion absorption VII Profitability of Fertilizer Use -maximum economic yield -prices vs. yield gains -organic vs. inorganic forms

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 286

Course Change Request

Date Submitted: 09/21/25 5:02 pm

Viewing: **PLSS ~~AGRO~~ 409 : Weed Ecology and Management ~~Weed Science~~**

Also listed as: ~~**AGRO 409**~~

Formerly known as: **AGRO 409**

Last approved: 09/27/23 3:17 am

Last revision: 09/21/25 5:02 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 409:
Agronomy (AGRO)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	270-745-5969

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	409
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:29 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title
Weed Ecology and Management ~~Weed Science~~

Abbreviated course title WEED ECOLOGY AND MANAGEMENT ~~WEED SCIENCE~~

Course description
Identification of prominent weed species; relationship of weeds to crop production problems; control measures, both physical and chemical, are presented.

Credit hours 2

Repeatable
Yes
Number of repeats 2
For maximum credits 2

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture

CIP Code 010605 - Landscaping and Groundskeeping.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
	(	CHEM 107	D	UG		No
Or		CHM 107C	D	UG	)	No
And	(	AGRO 320	D	UG		No
And		AGRO 350	D	UG	)	No

Corequisites
AGRO 410 - Weed Ecology and Management Laboratory

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Combining AGRO and HORT prefixes into PLSS simplifies course selections for students. Title change better describes ~~Addition of~~ course content. ~~objectives and course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Define the characteristics that enable weed species to compete effectively with crops.
2	Examine the nature of crop/weed interactions with a focus upon weed/crop competition.
3	Categorize various weed control methods including mechanical, biotechnological, chemical, and cultural.

#	Student Learning Outcomes
4	Explain herbicide mode of action including the physiological basis for various modes of action and the importance of mode of action in resistance management.
5	Identify the role of soil chemical, physical and biological factors in the efficacy and environmental fate of herbicides.
6	Illustrate various weed control strategies for important crops such as field corn, soybeans, tobacco, small grains, forages, and vegetable/fruit crops.

Content outline

#	Topic
1	Introduction & Weed Classification Weed-Crop Competition Weed Control Methods Role of Biotechnology in Weed Control • Roundup Ready™ crops • Liberty Link™ crops • Xtend™ and Enlist™ crops Herbicide Application Procedures Herbicide Classification Formulations & Adjuvants Herbicide Mode of Action and Selectivity Mechanisms • Mode of Action vs. Site of Action • Herbicide Groups • Crop and Weed Symptomology Resistant Weed Biotypes & Their Management Soil/Herbicide Interactions Weed Management in Selected Crops • Grain Crops (corn, soybeans, wheat) • Forage Crops (grasses, legumes) • Fruit and Vegetable Crops • Other Crops (Tobacco, Hemp)

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 287

Course Change Request

Date Submitted: 09/21/25 5:03 pm

Viewing: PLSS ~~AGRO~~ 410 : Weed Ecology and Management ~~Science~~ Laboratory

Also listed as: ~~AGRO 410~~

Formerly known as: AGRO 410

Last approved: 09/27/23 3:17 am

Last revision: 09/21/25 5:03 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 410:
Agronomy (AGRO)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	(270) 745-5969

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	410
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:29 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title
Weed Ecology and Management ~~Science~~ Laboratory

Abbreviated course title WEED ECOLOGY AND MGMT LAb ~~WEED SCIENCE LAB~~

Course description
A laboratory course correlated with PLSS 410. ~~AGRO 409.~~

Credit hours 1

Repeatable
Yes
Number of repeats 2
For maximum credits 1

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lab

CIP Code 010605 - Landscaping and Groundskeeping.

Does this course have prerequisites

No

Corequisites
AGRO 409 - Weed Ecology and Management

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Combining AGRO and HORT prefixes into PLSS simplifies course selections for students. Title change better describes ~~To add~~ course content. ~~objectives and course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Identify annual, biennial and perennial weed species common to southcentral Kentucky and the surrounding region.
2	Outline, demonstrate and calculate key components of the sprayer calibration process.
3	Interpret various aspects of a herbicide label.
4	Illustrate herbicide symptomology via outdoor demonstration areas.

Content outline

#	Topic
1	I. Weed Identification II. Sprayer Calibration III. Herbicide Symptomology IV. Herbicide Labels

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 289

Course Change Request

Date Submitted: 09/21/25 5:04 pm

Viewing: **PLSS ~~AGRO~~ 422 : Grain ~~Field~~ Crops Production**

Also listed as: ~~**AGRO 422**~~

Formerly known as: **AGRO 422**

Last approved: 09/27/23 3:17 am

Last revision: 09/21/25 5:04 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 422:
Agronomy (AGRO)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	(270) 745-5969

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	422
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:29 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title
Grain ~~Field~~ Crops Production

Abbreviated course title GRAIN ~~FIELD~~ CROPS PRODUCTION

Course description
Distribution, improvement, morphology, culture, harvesting and utilization of field crops are presented.

Credit hours 3

Repeatable
Yes
Number of repeats 2
For maximum credits 3

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture
Lecture/Lab

CIP Code 010304 - Crop Production.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		AGRO 320	D	UG		No
And		AGRO 350	D	UG		No

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Combining AGRO and HORT prefixes into PLSS simplifies course selections for students. Title change better describes ~~To add~~ course content. ~~objectives and course outline.~~ Schedule type change allows for more experiential learning opportunities.

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Identify the growth habit and specific growth stages of the three primary U.S. field crops (corn, wheat and soybeans).
2	Recognize the uses of major U.S. field crops.
3	Review the nutrient and water requirements of the major field crops and the impact of nutrient and/or water deficiencies upon yield and quality.
4	Describe the common management practices necessary for successful production of field crops.

Content outline

#	Topic
1	morphology, uses, production practices, stages of growth, role of biotechnology in the production of, etc. of the following field crops: Corn Cotton Grain Sorghum Soybeans Hemp Canola Wheat Tobacco Peanuts

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 299

Course Change Request

Date Submitted: 09/21/25 5:05 pm

Viewing: PLSS ~~AGRO~~ 452 : Soil Ecosystems ~~Microbiology~~

Also listed as: ~~AGRO 452~~

Formerly known as: AGRO 452

Last approved: 09/27/23 3:17 am

Last revision: 09/21/25 5:05 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 452:
Agronomy (AGRO)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Becky Gilfillen	becky.gilfillen@wku.edu	(270) 745-5970

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	452
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:29 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title

Soil Ecosystems ~~Microbiology~~

Abbreviated course title SOIL ECOSYSTEMS ~~MICROBIOLOGY~~

Course description

Soil microbial populations and systems and their influence on plant nutrition, soil organic matter, its decomposition and other soil microbial biochemical processes are presented.

Credit hours 3

Repeatable

Yes

Number of repeats 2

For maximum credits 3

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type

Lecture

CIP Code 011203 - Soil Microbiology.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		AGRO 350	D	UG		No

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major?	No
Classification restriction?	No
Departmental Restrictions	

Reason for changing the course

Combining HORT and AGRO prefixes into PLSS simplifies course selections for students. Title change better describes course content. ~~Addition of course objectives and a course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate?	No
Are you seeking Colonnade approval for this course?	No

Student Learning Outcomes

#	Student Learning Outcomes
1	Assess soil microbial populations and conclude how those populations are affected by various environmental factors.
2	Recognize numerous soil microorganisms and assess their importance to soil quality and agricultural productivity.
3	Interpret how soil nutrient cycling is important and how agricultural productivity is affected by it.

Content outline

#	Topic
1	Introduction to Soil Microbiology and The Soil Habitat Bacteria & Archae Fungi Soil Fauna Spatial Distribution & Ecology of Soil Biota Plant-Soil Biota Interactions Mid-term exam Management of Soil Biota and Influences on Populations Metabolic Physiology of Soil Microorganisms Carbon Cycle – Transformation of Organic Matter Nitrogen Cycle Biological Nitrogen Inputs Biological Cycling of Inorganic Nutrients and Metals Modeling Soil Organic Matter & Nutrient Cycling

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 305

Course Change Request

Date Submitted: 09/21/25 5:06 pm

Viewing: **PLSS ~~AGRO~~ 457 : Soil Formation ~~Formation, Classification~~ and Classification ~~Mapping~~**

Also listed as: ~~**AGRO 457**~~

Formerly known as: **AGRO 457**

Last approved: 09/27/23 3:17 am

Last revision: 09/21/25 5:06 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 457:
Agronomy (AGRO)

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:29 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Becky Gilfillen	becky.gilfillen@wku.edu	(270) 745-5970

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	457
Department	Agriculture		

College Science and Engineering

Course title
Soil Formation ~~Formation, Classification~~ and Classification ~~Mapping~~

Abbreviated course title SOIL FORM AND CLASSIFICATion ~~SOIL FORM/CLASS/MAP~~

Course description
Soil origin; classification schemes; profile description, mapping and interpretation of soil survey information emphasizing Kentucky soils, are discussed. Note: Permission of instructor may be required.

Credit hours 2

Repeatable
Yes
Number of repeats 2
For maximum credits 2

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture

CIP Code 011201 - Soil Science and Agronomy, General.

Does this course have prerequisites

Yes

Prerequisites

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		AGRO 350	D	UG		No

Corequisites
AGRO 458 - Soil Formation and Classification Laboratory

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major?	No
Classification restriction?	No
Departmental Restrictions	

Reason for changing the course

Combining HORT and AGRO prefixes into PLSS simplifies course selections for students. Title change better describes course content. ~~Addition of course objectives and a course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate?	No
Are you seeking Colonnade approval for this course?	No

Student Learning Outcomes

#	Student Learning Outcomes
1	Complete a physical description of a soil profile including texture, structure, redox features, etc.
2	Utilize the Web Soil Survey to interpret previously provided information and construct decisions about land capability & productivity.

Content outline

#	Topic
1	I Introduction to the course II Soil as a natural body - terminology III Soil descriptions - tools of the trade

#	Topic
	-color -texture -structure -mottling -concentrations -consistency IV Soil Profiles -organic horizons -mineral horizons -illuvial/elluvial processes -additions/losses/translocations/transformation V Soil Morphology of a profile -A horizon and subordinate distinctions -B horizon and subordinate distinctions -E horizon and criteria -C horizon and subordinate distinctions -R horizon and criteria 2 VI Lithologic discontinuities and contacts VII Five Soil Orders -Entisols, Inceptisols, Mollisols, Alfisols, and Ultisols Mid Term Exam VIII 5 Soil Forming Factors and their effect on the soil profile IX The other Seven Soil Orders - Andisols, Aridosols, Histsols, Oxisols, Spodosols, Oxisols, Vertisols -new addition: Gelisols X Parent materials -Residuum -Alluvium -Colluvium -Loess -Eolian -Coastal plain deposits -Glacial till -Volcanic ash XI Topography -slope -aspect -toposequences and catenas XII Climatic Factors -rainfall -temperature -ancient climatic factors -recent climatic factors XIII Soil Organisms

#	Topic
	-macro organisms -microorganisms XIV Time -when does the clock start -rate of soil development XV Soil Taxonomic Systems -Order -Suborder -Great Group -Subgroup -Family -Series XVI Using the web soil survey XVII Other topics as time allows

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 315

Course Change Request

Date Submitted: 09/21/25 5:06 pm

Viewing: PLSS ~~AGRO~~ 458 : Soil Formation ~~Formation, Classification~~ and Classification ~~Mapping~~ Laboratory

Also listed as: ~~AGRO 458~~

Formerly known as: AGRO 458

Last approved: 09/27/23 3:17 am

Last revision: 09/21/25 5:06 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 458:
Agronomy (AGRO)

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:29 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Becky Gilfillen	becky.gilfillen@wku.edu	(270) 745-5970

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	458
Department	Agriculture		

College Science and Engineering

Course title
Soil Formation ~~Formation, Classification~~ and Classification ~~Mapping~~ Laboratory

Abbreviated course title SOIL FORMation AND CLASS lab ~~SOIL FORM/CLASS/MAP LAB~~

Course description
A laboratory course correlated with AGRO 457.

Credit hours 1

Repeatable
Yes
Number of repeats 2
For maximum credits 1

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lab

CIP Code 011201 - Soil Science and Agronomy, General.

Does this course have prerequisites

No

Corequisites
AGRO 457 - Soil Formation and Classification

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Combining HORT and AGRO prefixes into PLSS simplifies course selections for students. Title change better describes course content. ~~Addition of course objectives and a course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Collect a complete physical description of a soil profile and classify the soil using the rules of Soil Taxonomy.
2	Students who elect to will categorize various soils at a regional or national Soils Judging Content.

Content outline

#	Topic
1	I. Introduction to Lab II. Hands-on characterization of soil profiles at the WKU AREC and other locations. III. Contest preparation and participation. IV. Wrap Up

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 317

Course Change Request

Date Submitted: 09/21/25 5:26 pm

Viewing: PLSS ~~AGRO~~ 475 : Selected Topics in Plant and Soil Sciences ~~Agriculture~~

Also listed as: ~~AGRO 475~~

Formerly known as: AGRO 475

Last approved: 09/27/23 3:17 am

Last revision: 09/21/25 5:26 pm

Changes proposed by: wll99339

Catalog Pages referencing this course

AGRO 475:
Agronomy (AGRO)

Proposed Action

Active

Contact(s)

Name	E-mail	Phone
Todd Willian	todd.willian@wku.edu	(270) 745-5969

Review Type	Full Review ~~Expedited~~		
Term for implementation	Spring 2026		
Academic Level	Undergraduate		
Course prefix (subject area)	PLSS - Plant & Soil Sciences ~~AGRO - Agronomy~~	Course number	475
Department	Agriculture		

In Workflow

1. **AGRI Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Undergraduate Curriculum Committee
5. University Senate
6. Provost
7. Course Inventory

Approval Path

1. 09/21/25 7:29 pm Paul Woosley (paul.woosley): Approved for AGRI Approval

History

1. Sep 27, 2023 by William Willian (todd.willian)

College Science and Engineering

Course title
Selected Topics in Plant and Soil Sciences ~~Agriculture~~

Abbreviated course title SELECT TOPICS IN PLANT/Soil ~~TOPICS AGRONOMY~~

Course description
Special topics acquaint advanced undergraduate students with scientific developments of current interest in agriculture. Appropriate topic titles are assigned. Lecture and assignments vary with credit. May be repeated with change in content. Note: Consent of instructor required.

Credit hours 1-3

Repeatable
Yes
Number of repeats 3
For maximum credits 12

Default grade type Standard Letter Alternate grade type(s)

Is this course intended to span more than one term?

No

Schedule type
Lecture

CIP Code 011201 - Soil Science and Agronomy, General.

Does this course have prerequisites

No

Corequisites

Equivalent Courses

Restrictions:

College restriction? No

Field of study restriction/major? No

Classification restriction? No

Departmental Restrictions

Reason for changing the course

Combining HORT and AGRO prefixes into PLSS simplifies course selections for students. Title change better describes ~~Addition of~~ course content. ~~objectives and course outline.~~

Is this related to other courses at WKU?

No

What departments/programs have been consulted concerning potential impact (e.g. to possible duplication or conflict, changed corequisite or prerequisite for equivalent courses, etc.)? Please provide names and dates for individuals consulted.

N/A

Is this course part of a program that leads to teacher certificate? No

Are you seeking Colonnade approval for this course? No

Student Learning Outcomes

#	Student Learning Outcomes
1	Identify, discuss and interpret topical areas within the field of agronomy. Topics of study vary within the broad range of agronomic disciplines.

Content outline

#	Topic
1	- Introduction of topical area - discussion of topical area and its respective sub-categories or sub-disciplines - evaluation of student learning

Student expectations and requirements

Tentative texts and course materials

Special equipment, materials, or library resources needed

Additional information

Supporting documentation

Reviewer Comments

Key: 319

Program Change Request

Date Submitted: 09/24/25 10:50 am

Viewing: 525 : Biology, Bachelor of Science

Last approved: 06/12/25 3:27 pm

Last edit: 09/24/25 10:50 am

Changes proposed by: smr85629

Catalog Pages
Using this Program
Biology, Bachelor of Science (525)

Proposed Action

In Workflow

1. **BIOL Approval**
2. **SC Dean**
3. SC Curriculum Committee
4. Professional Education Council
5. Undergraduate Curriculum Committee
6. University Senate
7. Provost
8. Program Inventory

Approval Path

1. 09/24/25 11:29 am Douglas McElroy (doug.mcelroy): Approved for BIOL Approval

History

1. May 19, 2021 by Rheanna Plemons (rheanna.plemons)
2. Aug 25, 2021 by Jessica Dorris (jessica.dorris)
3. Apr 22, 2022 by Jessica Dorris (jessica.dorris)
4. Apr 12, 2023 by Jennifer Hammonds (jennifer.hammonds)
5. May 23, 2024 by Jessica Dorris (jessica.dorris)
6. Jun 25, 2024 by Ryan Wilson (ryan.wilson)

7. Jun 12, 2025 by Simran Banga (simran.banga)

Active

Contact Person

Name	Email	Phone
Simran Banga	simran.banga@wku.edu	2707454748

Term of Implementation	2026-2027
Program Reference Number	525
Review Type	Full Review
Academic Level	Undergraduate
Program Type	Major
Degree Types	Bachelor of Science
Department	Biological Sciences
College	Science and Engineering
Program Name (eg. Biology)	Biology, Bachelor of Science

Will this program have concentrations?

Yes

Concentrations

Concentrations

Applied Genetics (BIAG)
Applied Microbiology (BIMI)
Animal Physiology and Behavior (BIAP)
Ecology, Wildlife, & Conservation (BIWC)
Integrative Biology (BIIB)
Molecular Biotechnology (BIMB)
Pre-Medical Professions (BIPM)

CIP Code	26.0101 - Biology/Biological Sciences, General.
Will this program lead to teacher certification?	Yes

Does the proposed program contain 25% or more new content not previously taught in another course at WKU? If yes, contact the Office of the Provost for additional SACSCOC proposal requirements

No

Catalog Content

Program Overview (Catalog field: Overview tab)

The major in Biology (525) provides students the opportunity to undertake an in-depth study of biological sciences and its applications. A minor, second major, or certificate is not required. The major in Biology begins with foundation classes and laboratories that build into a core of advanced courses and laboratories. In addition to a required core, students complete a range of biology elective courses tailored to their interests to support their career goals. The students can also apply up to six credit hours of faculty-guided independent research and/or an internship experience toward their degree program. The program offers seven ~~six~~ different concentrations - Applied Genetics (BIAG), Applied Microbiology (BIMI), Animal Physiology & Behavior (BIAP), Ecology, Wildlife, & Conservation (BIWC), Integrative Biology (BIIB), Molecular Biotechnology (BIMB) and Pre-Medical Professions (BIPM). These seven ~~six~~ concentrations are designed to facilitate essential requirements and provide training for a variety of career pathways and advanced degree programs to suit student interests.

Curriculum Requirements (Catalog field: Program Requirements)

Program Requirements (54 hours)

This option for a major in biology requires a minimum of 54 hours in biology including 29-30 hours at the 300 or higher level. No minor is required. A range of upper-level courses are aligned with six concentrations offered within the major.

Approved Shared Content from /shared/undergraduate-major-requirements/
Last Approved: Jun 30, 2025 9:25am

A baccalaureate degree requires a minimum of 120 unduplicated semester hours. More information can be found at www.wku.edu/registrar/degree_certification.php.
Students who began WKU in the Fall 2014 and thereafter should review the Colonnade requirements located at: https://www.wku.edu/colonnade/colonnaderequirements.php.

Required Courses		
BIOL 120 & BIOL 121	Biological Concepts: Cells Metabolism and Genetics and Biological Concepts: Cells, Metabolism, and Genetics Lab [1]	4
BIOL 122 & BIOL 123	Biological Concepts: Evolution, Diversity, and Ecology and Biological Concepts: Evolution, Diversity, and Ecology Lab [1]	4
BIOL 489	Professional Aspects of Biology	1
Required Supporting Courses		
BIOL 382	Introductory Biostatistics	3-4
or MATH 136	Calculus I	
or MATH 183	Introductory Statistics	
CHEM 120 & CHEM 121	College Chemistry I and College Chemistry I Laboratory	5

PHYS 231 & PHYS 232	Introduction to Physics and Biophysics I and Laboratory for Physics and Biophysics I	4
Total Hours		21-22

Applied Genetics (BIAG) Concentration

Applied Genetics Core Courses		
BIOL 224 & BIOL 225	Animal Biology and Diversity and Animal Biology and Diversity Lab	4
BIOL 327 & BIOL 337	Genetics and Genetics Laboratory	4
BIOL 316	Evolution: Theory and Process	3
BIOL 312	Bioinformatics	4
BIOL 319	Introduction to Molecular and Cell Biology	3
or BIOL 382	Introductory Biostatistics	
or BIOL 411	Cell Biology	
BIOL 403	Molecular Basis of Cancer	3
or BIOL 495	Molecular Genetics	
Applied Genetics Electives		**12-13**
Suggested electives, include at least one with an associated lab component*		
BIOL 319	Introduction to Molecular and Cell Biology	
BIOL 328	Immunology	
BIOL 335	Neurobiology	
BIOL 350	Introduction to Recombinant Genetics	
BIOL 369	Internship in Biology	
BIOL 382	Introductory Biostatistics	
BIOL 399	Research in the Biological Sciences	
BIOL 403	Molecular Basis of Cancer	
BIOL 407	Virology	
BIOL 411	Cell Biology	
BIOL 446	Biochemistry I	
BIOL 450	Recombinant Gene Technology	
BIOL 495	Molecular Genetics	
Total Hours		33-34

Applied Microbiology (BIMI) Concentration

Applied Microbiology Core Courses		
BIOL 226 & BIOL 227	Microbial Biology and Diversity and Microbial Biology and Diversity Lab	4
BIOL 319 & BIOL 322	Introduction to Molecular and Cell Biology and Introduction to Molecular and Cell Biology Laboratory	4
BIOL 316	Evolution: Theory and Process	3
BIOL 312	Bioinformatics	4
BIOL 470	Pathogenic Microbiology	4
BIOL 328	Immunology	3
or BIOL 336	Food Microbiology	
or BIOL 472	Applied and Environmental Microbiology	
or BIOL 407	Virology	
Applied Microbiology Electives		**11-12**
Suggested electives *		
BIOL 328	Immunology	
BIOL 336	Food Microbiology	
BIOL 350	Introduction to Recombinant Genetics	
BIOL 369	Internship in Biology	
BIOL 399	Research in the Biological Sciences	
BIOL 407	Virology	
BIOL 446	Biochemistry I	
BIOL 450	Recombinant Gene Technology	
BIOL 472	Applied and Environmental Microbiology	
BIOL 495	Molecular Genetics	
Total Hours		33-34

Animal Physiology and Behavior (BIAP) Concentration ~~Concentration~~

Animal Physiology and Behavior Core Courses		
BIOL 224 & BIOL 225	Animal Biology and Diversity and Animal Biology and Diversity Lab	4
BIOL 316	Evolution: Theory and Process	3

BIOL 327 & BIOL 337	Genetics and Genetics Laboratory	4
BIOL 330 & BIOL 331	Animal Physiology and Animal Physiology Laboratory	4
BIOL 334	Animal Behavior	3
BIOL 335	Neurobiology	3
or BIOL 377	Animal Form and Function	
or BIOL 464	Endocrinology	
Animal Physiology and Behavior Electives		**12-13**
Suggested electives, include at least one with an associated lab component *		
BIOL 315	Ecology	
BIOL 321	Comparative Anatomy	
BIOL 335	Neurobiology	
BIOL 377	Animal Form and Function	
BIOL 382	Introductory Biostatistics	
BIOL 369	Internship in Biology	
BIOL 399	Research in the Biological Sciences	
BIOL 446	Biochemistry I	
BIOL 464	Endocrinology	
Total Hours		33-34

Ecology, Wildlife, & Conservation (BIWC) Concentration

Ecology, Wildlife, & Conservation Core Courses		
BIOL 222 & BIOL 223	Plant Biology and Diversity and Plant Biology and Diversity Lab	4
or BIOL 224 & BIOL 225	Animal Biology and Diversity and Animal Biology and Diversity Lab	
BIOL 315 & BIOL 355	Ecology and Ecology Lab	5
BIOL 316	Evolution: Theory and Process	3
BIOL 327 & BIOL 337	Genetics and Genetics Laboratory	4
BIOL 332	Principles of Wildlife Ecology	3-4
or BIOL 458	Fisheries Management	
BIOL 382	Introductory Biostatistics	3

Ecology, Wildlife, & Conservation Electives		10-11
Suggested electives, include at least one with an associated lab component *		
BIOL 325	Insect Biodiversity	
BIOL 332	Principles of Wildlife Ecology	
BIOL 326	Ornithology	
BIOL 369	Internship in Biology	
BIOL 399	Research in the Biological Sciences	
BIOL 348	Plant Taxonomy	
BIOL 456	Ichthyology	
BIOL 457	Herpetology	
BIOL 458	Fisheries Management	
BIOL 459	Mammalogy	
BIOL 477	Marine Biology	
BIOL 485	Field Biology	
BIOL 497	Aquatic Field Ecology	
Total Hours		33-34

Integrative Biology (BIIB) Concentration

BIOL 222 & BIOL 223	Plant Biology and Diversity and Plant Biology and Diversity Lab	4
or BIOL 224 & BIOL 225	Animal Biology and Diversity and Animal Biology and Diversity Lab	
or BIOL 226 & BIOL 227	Microbial Biology and Diversity and Microbial Biology and Diversity Lab	
BIOL 319 & BIOL 322	Introduction to Molecular and Cell Biology and Introduction to Molecular and Cell Biology Laboratory	4
or BIOL 327 & BIOL 337	Genetics and Genetics Laboratory	
BIOL 315	Ecology	3
or BIOL 316	Evolution: Theory and Process	
Biology Electives 300- or 400- level, include at least two with an associated labs		19-20
Laboratory Experience Courses (Select Two) *		
BIOL 212	Genome Discovery Exploration	
BIOL 312	Bioinformatics	

BIOL 321	Comparative Anatomy	
BIOL 322	Introduction to Molecular and Cell Biology Laboratory	
BIOL 325	Insect Biodiversity	
BIOL 331	Animal Physiology Laboratory	
BIOL 337	Genetics Laboratory	
BIOL 338	Immunology Lab	
BIOL 348	Plant Taxonomy	
BIOL 350	Introduction to Recombinant Genetics	
BIOL 355	Ecology Lab	
BIOL 356	Ornithology Lab	
BIOL 404	Techniques and Theory of Electron Microscopy	
BIOL 412	Cell Biology Laboratory	
BIOL 447	Biochemistry Laboratory	
BIOL 450	Recombinant Gene Technology	
BIOL 456	Ichthyology	
BIOL 457	Herpetology	
BIOL 458	Fisheries Management	
BIOL 470	Pathogenic Microbiology	
BIOL 472	Applied and Environmental Microbiology	
BIOL 485	Field Biology	
BIOL 496	Plant Biotechnology	
BIOL 497	Aquatic Field Ecology	
Science Process Courses (Select One) *		3-4
BIOL 212	Genome Discovery Exploration	
BIOL 312	Bioinformatics	
BIOL 331	Animal Physiology Laboratory	
BIOL 350	Introduction to Recombinant Genetics	
BIOL 355	Ecology Lab	
BIOL 397	Scientific Process	
BIOL 404	Techniques and Theory of Electron Microscopy	
BIOL 407	Virology	
BIOL 412	Cell Biology Laboratory	
BIOL 456	Ichthyology	

BIOL 457	Herpetology	
BIOL 470	Pathogenic Microbiology	
BIOL 495	Molecular Genetics	
BIOL 496	Plant Biotechnology	
BIOL 497	Aquatic Field Ecology	
HON 404	Honors Thesis / Project II	
Total Hours		33-35

Molecular Biotechnology (BIMB) Concentration ~~Concentration~~

Molecular Biotechnology Core Courses		
BIOL 226 & BIOL 227	Microbial Biology and Diversity and Microbial Biology and Diversity Lab	4
BIOL 316	Evolution: Theory and Process	3
BIOL 212	Genome Discovery Exploration	2
BIOL 319 & BIOL 322	Introduction to Molecular and Cell Biology and Introduction to Molecular and Cell Biology Laboratory	4
BIOL 312	Bioinformatics	4
BIOL 350	Introduction to Recombinant Genetics	3
BIOL 450	Recombinant Gene Technology	3
Molecular Biotechnology Electives		**10**
BIOL 327	Genetics	
BIOL 328	Immunology	
BIOL 337	Genetics Laboratory	
BIOL 338	Immunology Lab	
BIOL 369	Internship in Biology	
BIOL 382	Introductory Biostatistics	
BIOL 399	Research in the Biological Sciences	
BIOL 403	Molecular Basis of Cancer	
BIOL 407	Virology	
BIOL 411	Cell Biology	
BIOL 412	Cell Biology Laboratory	
BIOL 470	Pathogenic Microbiology	
BIOL 495	Molecular Genetics	
BIOL 496	Plant Biotechnology	

Total Hours		33

Pre-Medical Professions (BIPM) Concentration

Pre-Medical Professions Core Courses		
BIOL 224 & BIOL 225	Animal Biology and Diversity and Animal Biology and Diversity Lab	4
or BIOL 226 & BIOL 227	Microbial Biology and Diversity and Microbial Biology and Diversity Lab	
BIOL 316	Evolution: Theory and Process	3
BIOL 319 & BIOL 322	Introduction to Molecular and Cell Biology and Introduction to Molecular and Cell Biology Laboratory	4
or BIOL 327 & BIOL 337	Genetics and Genetics Laboratory	
BIOL 330 & BIOL 331	Animal Physiology and Animal Physiology Laboratory	4
or BIOL 411 & BIOL 412	Cell Biology and Cell Biology Laboratory	
or BIOL 397	Scientific Process	
BIOL 321	Comparative Anatomy	3-4
or BIOL 328	Immunology	
or BIOL 382	Introductory Biostatistics	
or BIOL 446	Biochemistry I	
Pre-Medical Professions Electives		**13-16**
Suggested electives, include at least one with an associated lab component *		
BIOL 319	Introduction to Molecular and Cell Biology	
BIOL 327	Genetics	
BIOL 328	Immunology	
BIOL 330	Animal Physiology	
BIOL 335	Neurobiology	
BIOL 321	Comparative Anatomy	
BIOL 369	Internship in Biology	
BIOL 382	Introductory Biostatistics	
BIOL 397	Scientific Process	
BIOL 399	Research in the Biological Sciences	
BIOL 411	Cell Biology	

BIOL 446	Biochemistry I
BIOL 467	Biochemistry II
BIOL 464	Endocrinology
BIOL 470	Pathogenic Microbiology
Total Hours	32-35

[1] Must complete with a grade of “C” or better.

[2] Elective Coursework:

In consultation with their advisor, students select majors-level coursework to obtain a minimum of 54 credits total, provided that at least 30 hours total are upper-division courses.

Students may count up to 6 credit hours of a combination of BIOL 369 and/or BIOL 399, and up to 4 credits of BIOL 485 toward this major.

Professional Programs have additional course requirements beyond those listed in PMP Concentration. Consult with Pre-health advisors.

* The following BIOL courses will not count towards the BIOL electives nor the Biology major requirements: BIOL 113, BIOL 114, BIOL 131, BIOL 231, BIOL 207, BIOL 208, BIOL 295, BIOL 303.

4-Year Plan

First Year

Fall	Hours	Spring	Hours
BIOL 120 & BIOL 121 or BIOL 122 ***and*** BIOL 123	4	BIOL 122 & BIOL 123 or BIOL 120 ***and*** BIOL 121	4
MATH 116 (or higher)	3	CHEM 120 & CHEM 121	5
ENG 100	3	COMM 145	3
HIST 101 or HIST 102	3	Colonnade - Explorations	3
Elective	3		
	16		15

Second Year

Fall	Hours	Spring	Hours
BIOL 222 & BIOL 223 , BIOL 224 ***and*** BIOL 225, or BIOL 226 ***and*** BIOL 227	4	BIOL 319 & BIOL 322 or BIOL 327 ***and*** BIOL 337	4
Concentration Supporting Elective (see Biology advisor)	4	ENG 200	3
Colonnade - Foundations	3	PHYS 231 & PHYS 232	4
Colonnade - Explorations	3	Colonnade - Explorations	3
	14		14

Third Year

Fall	Hours	Spring	Hours
BIOL 315 or BIOL 316	3	Upper-Level BIOL Elective with Lab	4

First Year

Fall	Hours	Spring	Hours
Upper-Level BIOL Elective with lab (see Biology advisor)	4	Upper-Level Elective	3
Colonnade - Explorations	3	Upper-Level BIOL Elective	3
Colonnade - Connections	3	Colonnade Connections	3
Upper-Level Elective	3	Writing in the Disciplines	3
	16		16

Fourth Year

Fall	Hours	Spring	Hours
BIOL 489	1	Upper-Level BIOL Elective	4
Upper-Level BIOL Elective	4	Upper-Level BIOL Elective	4
World Language	3	Colonnade - Connections	3
BIOL Process Elective	3	Upper-Level BIOL Elective	4
Upper-Level Elective	3		
	14		15

Total Hours 120

Will this program be managed or owned by more than one department?

No

Does this program include courses from outside your department?

Yes

Outside Courses
Details

Who approved including these courses?	When were they approved?
Math - Dr. Kanita DuCloux	7/18/2024
Chemistry - Dr. Matt Nee	7/8/2024
Physics - Dr. Mike Carini	7/11/2024

Please insert one Learning Outcome per box. Click green plus sign for additional LO boxes

Learning Outcomes
and Measurement
Plan

	List all student learning outcomes of the program.	Measurement Plan
SLO 1	Demonstrate a level of biological content knowledge appropriate to their degree level.	Biology Assessment Exam – an objective, 56-item multiple-choice instrument designed to assess content knowledge within the program discipline. The exam is constructed around 14 vignettes, 2 each representing the seven major areas of emphasis in our core curriculum (Cells, Metabolism, Genetics, Ecology, Evolution, Diversity, and Biotechnology).
SLO 2	Demonstrate an understanding of research ethics and the responsible conduct of research.	The Collaborative Institutional Training Initiative (CITI) research ethics training course in Responsible Conduct of Research
SLO 3	Demonstrate the ability to apply scientific methodology and field/laboratory/analytical skills to a biological question.	Process-based project, culminating in either a master's thesis or a product of independent investigation (nonthesis), assessed using the AAC&U LEAP Inquiry & Analysis rubric.

Assessment Template: https://www.wku.edu/academicaffairs/ee/assurance_learning_resources.php

Upload Assessment Plan: biology_ug_525 2023-24.docx

Delivery Mode

Is 25% or more of this program offered at a location other than main campus?

No

Enter Location(s) and Percentage of Program Offered at Location(s)

Is 50% or more of this program offered by distance education (online asynchronous, online synchronous, connected classrooms, etc.)?

No

Do you plan to offer 100% of this program online?

No

If no, enter the percentage of the program that will be taught online.

0

Do you plan to offer 100% of this program face-to-face?

Yes

Do you plan to offer at least 25% of this program as a direct assessment competency-based educational program?

No

See the SACSCOC Policy on Direct Assessment Competency-based Educational Programs.
https://www.sacscoc.org/pdf/081705/DirectAssessmentCompetencyBased.pdf

Library Resources

Attach library resources

Rationale for the program proposal?

Biological Sciences has suspended the BS in Moleccular Biotechnology. The Biology 525 program is revised to add Molecular Biotechnology as a new concentration.

Additional Attachments

Additional information or attachments

Updated by Registrar 4/22/22. CIS 243 changed to BDAN 305 effective 202230.

Reviewer Comments

Key: 285