

Cover Sheet: Request 15292

Agroecology and Sustainable Food Systems certificate

Info

Process	Certificate New Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Sukhwinder Bali sukhwinder.bali@ufl.edu
Created	9/28/2020 11:59:37 AM
Updated	3/15/2021 11:46:06 AM
Description of request	New Undergraduate Certificate request

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Agronomy 60080000	Diane Rowland		9/28/2020
Soils.pdf					9/28/2020
FRE Agroecology certificate letter.pdf					9/28/2020
Field and Fork.pdf					9/28/2020
Family Youth Community Science.pdf					9/28/2020
Entomology.pdf					9/28/2020
Agronomy.pdf					9/28/2020
Proposed curriculum.pdf					9/28/2020
College	Approved	CALS - College of Agricultural and Life Sciences	Joel H Brendemuhl	Edits requested by the CALS CC have been addressed.	11/16/2020
CALS_CC_Checklist.pdf					10/19/2020
Agroecology and Sustainable Food Systems .updated 11.3.docx					11/3/2020
Catalog.Agroecology and Sustainable Food Systems. updated.docx					11/3/2020
HOS - External Consult - Agroecology Certificate.pdf					11/16/2020
Office of Institutional Planning and Research	Commented	PV - Office of Institutional Planning and Research	Cathy Lebo	UF is not approved for any degree program for the requested CIP code 1.0308, Agroecology and Sustainable Agriculture. Need to find an alternate CIP code.	1/28/2021
No document changes					
Office of Institutional Planning and Research	Approved	PV - Office of Institutional Planning and Research	Cathy Lebo		2/17/2021
No document changes					
Associate Provost for Undergraduate Affairs	Approved	PV - Associate Provost for Undergraduate Affairs	Casey Griffith		2/17/2021
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			2/17/2021
No document changes					
Office of the Registrar					
No document changes					
OIPR Notified					

Step	Status	Group	User	Comment	Updated
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
Academic Assessment Committee Notified					
No document changes					
College Notified					
No document changes					

Certificate|New for request 15292

Info

Request: Agroecology and Sustainable Food Systems certificate

Description of request: New Undergraduate Certificate request

Submitter: Sukhwinder Bali sukhwinder.bali@ufl.edu

Created: 1/29/2021 11:46:28 AM

Form version: 4

Responses

Certificate Name

Enter the name of the certificate. Example: Urban Pest Management.

Response:

Agroecology and Sustainable Food Systems

Transcript Title

Enter the transcript title of the certificate. This is limited to 50 characters, including spaces.

Response:

Agroecology

Credits

Enter the total number of credit hours needed to complete the certificate program.

Response:

12

Level

Enter the program level of the certificate.

Response:

Baccalaureate

CIP Code

Enter the six digit Classification of Instructional Programs (CIP) code for the degree program associated with the proposed certificate. The code has the numerical format XX.XXXX. Contact the Office of Institutional Planning and Research (OIPR) to verify the CIP code for the existing degree program.

Response:

01.1201

Degree Program

Enter the degree program associated with the CIP code entered above (e.g. Accounting).

Response:

Agroecology and Sustainable Agriculture

Effective Term

Enter the term (semester and year) that the certificate would start. Please keep in mind that this may be adjusted depending on University deadlines for approval process.

Response:
Fall

Effective Year

Response:
2021

Certificate Description

Enter a description of the certificate. This is limited to 50 words or fewer.

Response:
The Agroecology Certificate explores the natural and social systems that guide sustainable agriculture. It provides interdisciplinary training and hands-on field research to teach the principles and practices of agroecological production within the context of environmental, social, and economic challenges. It prepares students for graduate programs or professions utilizing systems-thinking skills.

Requirements for Admission

List any requirements for admission to this new certificate program such as grade point average, background in the discipline, current enrollment status, etc.. Please indicate if the certificate only accepts students of a particular status: for example, current UF graduate students, graduate students in a specific college, non-degree seeking students, or any student status.

Response:
(List any requirements for admission to this new certificate program such as grade point average, background in the discipline, current enrollment status, etc.. Please indicate if the certificate only accepts students of a particular status: for example, current UF graduate students, graduate students in a specific college, non-degree seeking students, or any student status.)

Current UF students, of Sophomore or Junior standing.

Requirements for Completion

List all of requirements for completion of the certificate program, such as courses, internships, projects, etc. For each course, indicate prefix, number, title, # credits, and established grading scheme (letter grade or S/U). The title should be identical to the official title of the course as listed in the [Graduate](http://gradcatalog.ufl.edu/) catalog or [Graduate](http://gradcatalog.ufl.edu/) catalog.

Response:
Requirements for Completion (List all of requirements for completion of the certificate program, such as courses, internships, projects, etc. For each course, indicate prefix, number, title, # credits, and established grading scheme (letter grade or S/U). The title should be identical to the official title of the course as listed in the Undergraduate catalog or Graduate catalog.)

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number Course Title

Credit Hours Semester Offered Pre-requisites
ALS 4914

Project Teams

3

Fall

Junior Status or higher
AGR 4212

Alternative Cropping Systems 3

Spring

PLS 3004C

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are letter-graded (3 credits).

Course Number Course Title

Credit Hours Semester Offered Pre-requisites
ALS 3153

Agricultural Ecology

3

Spring + Fall

Junior Status or higher
ALS 4154

Global Agroecosystems

3

Spring

PLS 3004C
SWS 4207

Sustainable Agricultural 3

Fall

SWS 3022
and Urban Land Management
IDS 2935 Living and Eating on Earth 3

Fall

None

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number

Course Title

Credit Hours Semester Offered Pre-requisites
AEB 3671

Comparative World Agriculture 3

course catalog does not list a prerequisite
AEB 4126

Agricultural and Natural Resource Ethics 3

Junior Status or higher
ALS 3030C Urban Agriculture

3

sophomore standing
FYC 3521

Community Food Systems

3

Summer

Junior Status or higher

Rationale and Place in Curriculum

Describe the rationale for offering this new certificate and having it on the transcript, its place in the curriculum, how it will enhance the quality of the existing program or department. Also describe its overlap with any existing certificates and programs, and a justification for any such overlap. Note that documentation of consultation will be expected for any certificate with overlapping content.

Response:

(Describe the rationale for offering this new certificate and having it on the transcript, its place in the curriculum, how it will enhance the quality of the existing program or department. Also describe its overlap with any existing certificates and programs, and a justification for any such overlap. Note that documentation of consultation will be expected for any certificate with overlapping content.)

This certificate will provide students with unique training in sustainable agricultural systems that connects across ecological, agricultural, and social science disciplines. The required courses will provide critical experiential education opportunities to complement their in-class course of study. As a core courses, the Alternative Cropping Systems class provides breadth via a survey of agricultural systems and includes site visits to local farms and a hands-on project at the Field & Fork farm. The second core course, Project Teams, provides a more intensive, full-semester field research experience focused on exploring an agricultural question at the Field & Fork farm. In addition to the two core courses, the social science and natural science electives will broaden the students' perspectives of food systems and sustainability and help them examine how their interests fit into food system careers.

This certificate has similar themes as the graduate certificates in Agroecology (Sustainable Agroecosystem Certificate, Tropical Agriculture Certificate), but does not overlap closely with any of the undergraduate certificates.

Student Learning Outcomes

List each student learning outcome with its associated courses, assessment type (e.g. course-related exam/assignment/grade, final paper/project/presentation, standardized exam, capstone) and method (e.g. rubric, faculty committee, single faculty member).

Response:

Student Learning Outcomes (List each student learning outcome with its associated courses, assessment type (e.g. course-related exam/assignment/grade, final paper/project/presentation, standardized exam, capstone) and method (e.g. rubric, faculty committee, single faculty member)

Upon completion of this certificate students will be able to:

- Explain fundamental concepts relating to the structure and function of agroecosystems, techniques and methods for global food production, and the environmental challenges associated with various production systems.

- o Associated courses: AGR 4212, ALS 3153, ALS 4154, SWS 4207, AEB 4126, ALS 3030C, FYC 3521, IDS 2935

- o Achievement of these learning objectives will be assessed through class assessments (quizzes and exams), group projects, written reports, and class activities.

- Analyze and evaluate agricultural systems from ecological, environmental, and cultural perspectives.

- o Associated courses: ALS 4154, ALS, 4914, AGR 4212, ALS 3153, AEB 3671, AEB 4126

- o Achievement of these learning objectives will be assessed through Achievement of these learning objectives will be assessed through class assessments (quizzes and exams), group projects, written reports, and class activities.

- Apply scientific principles to develop testable scientific questions/hypotheses and research studies, and collect, analyze, and interpret data.

- o Associated courses: ALS 4914, AGR 4212, ALS 3030

- o Achievement of these learning objectives will be assessed through group research projects, written reports, and in-class activities and presentations.

- Synthesize course materials to develop and communicate (written and oral) solutions for real-world problems faced by local, regional, and global food production systems.

- o Associated courses: ALS 4914, AGR 4212, ALS 3153, IDS 2935

- o Achievement of these learning objectives will be assessed through group research projects, written reports, and in-class activities and presentations.

New Undergraduate or Professional Certificate Application: Draft

University of Florida Certificate Policy

Please review the University of Florida Certificate Policy (updated May, 2019), to ensure that the proposed certificate is in accords with UF Policy.

Certificate Name: Agroecology and Sustainable Food Systems

Transcript Title: Agroecology

Credits Required: 12

Level: Baccalaureate

CIP Code: 01.0308

Degree Program: Agroecology and Sustainable Agriculture

Effective Term: Fall 2021

Certificate Description (limited to 50 words or fewer).

The Agroecology Certificate explores the natural and social systems that guide sustainable agriculture. It provides interdisciplinary training and hands-on field research to teach the principles and practices of agroecological production within the context of environmental, social, and economic challenges. It prepares students for graduate programs or professions utilizing systems-thinking skills.

Requirements for Admission (List any requirements for admission to this new certificate program such as grade point average, background in the discipline, current enrollment status, etc.. Please indicate if the certificate only accepts students of a particular status: for example, current UF graduate students, graduate students in a specific college, non-degree seeking students, or any student status.)

Current UF students, of Sophomore or Junior standing.

Requirements for Completion (List all of requirements for completion of the certificate program, such as courses, internships, projects, etc. For each course, indicate prefix, number, title, # credits, and established grading scheme (letter grade or S/U). The title should be identical to the official title of the course as listed in the Undergraduate catalog or Graduate catalog.)

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
ALS 4914	Project Teams	3	Fall	Junior Status or higher
AGR 4212	Alternative Cropping Systems	3	Spring	PLS 3004C

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
ALS 3153	Agricultural Ecology	3	Spring + Fall	Junior Status or higher
ALS 4154	Global Agroecosystems	3	Spring	PLS 3004C
SWS 4207	Sustainable Agricultural and Urban Land Management	3	Fall	SWS 3022
IDS 2935	Living and Eating on Earth	3	Fall	None

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
AEB 3671	Comparative World Agriculture	3	Spring + Fall	(course catalog does not list a prerequisite)
AEB 4126	Agricultural and Natural Resource Ethics	3	Spring	Junior Status or higher
ALS 3030C	Urban Agriculture	3	Spring + Fall	sophomore standing
FYC 3521	Community Food Systems	3	Summer	Junior Status or higher

Rationale and Place in Curriculum Required (Describe the rationale for offering this new certificate and having it on the transcript, its place in the curriculum, how it will enhance the quality of the existing program or department. Also describe its overlap with any existing certificates and programs, and a justification for any such overlap. Note that documentation of consultation will be expected for any certificate with overlapping content.)

This certificate will provide students with unique training in sustainable agricultural systems that connects across ecological, agricultural, and social science disciplines. The required courses will provide critical experiential education opportunities to complement their in-class course of study. As a core courses, the Alternative Cropping Systems class provides breadth via a survey of agricultural systems and includes site visits to local farms and a hands-on project at the Field & Fork farm. The second core course, Project Teams, provides a more intensive, full-semester field research experience focused on exploring an agricultural question at the Field & Fork farm. In addition to the two core courses, the social science and natural science electives will broaden the students' perspectives of food systems and sustainability and help them examine how their interests fit into food system careers.

This certificate has similar themes as the graduate certificates in Agroecology (Sustainable Agroecosystem Certificate, Tropical Agriculture Certificate), but does not overlap closely with any of the undergraduate certificates.

Student Learning Outcomes (List each student learning outcome with its associated courses, assessment type (e.g. course-related exam/assignment/grade, final paper/project/presentation, standardized exam, capstone) and method (e.g. rubric, faculty committee, single faculty member)

Upon completion of this certificate students will be able to:

- Explain fundamental concepts relating to the structure and function of agroecosystems, techniques and methods for global food production, and the environmental challenges associated with various production systems.
 - Associated courses: AGR 4212, ALS 3153, SWS 4207, AEB 4126, ALS 3030C, FYC 3521
 - Achievement of these learning objectives will be assessed through class assessments (quizzes and exams), group projects, written reports, and class activities.
- Analyze and evaluate agricultural systems from ecological, environmental, and cultural perspectives.
 - Associated courses: ALS, 4914, AGR 4212, ALS 3153, AEB 3671, AEB 4126
 - Achievement of these learning objectives will be assessed through Achievement of these learning objectives will be assessed through class assessments (quizzes and exams), group projects, written reports, and class activities.
- Apply scientific principles to develop testable scientific questions/hypotheses and research studies, and collect, analyze, and interpret data.
 - Associated courses: ALS 4914, AGR 4212, ALS 3030C
 - Achievement of these learning objectives will be assessed through group research projects, written reports, and in-class activities and presentations.
- Synthesize course materials to develop and communicate (written and oral) solutions for real-world problems faced by local, regional, and global food production systems.
 - Associated courses: ALS 4914, AGR 4212, ALS 3153
 - Achievement of these learning objectives will be assessed through group research projects, written reports, and in-class activities and presentations.

Final Instructions

Prepare and upload documentation showing consultation with any academic units which may be affected by the proposed certificate. This documentation may include email correspondence, memos, or other letters of support from consulted academic units.

Prepare a copy of the proposed catalog changes that shows all revisions, for example using strikeouts and underlined text, or using tracked changes.

Additional Random Notes:

Source: <https://nces.ed.gov/ipeds/cipcode/searchresults.aspx?y=55&aw=agroecology>

Classification of Instructional Programs (CIP) Code: 01.0308

Agroecology and Sustainable Agriculture. A program that focuses on agricultural principles and practices that, over the long term, enhance environmental quality, make efficient use of nonrenewable resources, integrate natural biological cycles and controls, and are economically viable and socially responsible; and that may prepare individuals to apply this knowledge to the solution of agricultural and environmental problems. Includes instruction in principles of agroecology, crop and soil sciences, entomology, horticulture, animal science, weed science and management, soil fertility and nutrient cycling, applied ecology, agricultural economics, and rangeland ecology and watershed management.

Certificate Submission Required Documents:

- Catalog copy - catalog-style description of the certificate, requirements for entry, requirements for completion, and a suggested semester-by-semester plan, prepared as a Microsoft Word document.
- Supporting documentation - memos, emails, etc. from other units to provide evidence of the availability of courses that are required for the certificate and/or to provide evidence for support of the proposed certificate if there is clear or potential overlap or duplication of content.

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Transcript Title: Agroecology

Credits Required: 12

Level: Baccalaureate

CIP Code: 01.0308

Degree Program: Agroecology and Sustainable Agriculture

Effective Term: Fall 2021

Certificate Description (limited to 50 words or fewer).

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AGR 4212	Alternative Cropping Systems	3	Spring	PLS 3004C

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 - Associated courses: AGR 4212, ALS 3153, SWS 4207, AEB 4126, ALS 3030C, FYC 3521
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Final Instructions

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Prepare a copy of the proposed catalog changes that shows all revisions, for example using strikeouts and underlined text, or using tracked changes.

Additional courses for future consideration

Natural Sciences

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
FOR 4854	Agroforestry	3	Spring	None
SWS 4116	Environmental Nutrient Management	3	Fall + Spring	SWS 3022
SWS 4231	Soil, Water, and Land Use	3		

Social Sciences

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
AEB 2014	Economic Issues, Food, and You	3	Fall	None
AEB 3103	Principles of Food and Resource Economics	4		MAC 2233 / MAC 2311 or higher.
GEO 3315	Geography of Crop Plants	3		

Additional Random Notes:

Source: <https://nces.ed.gov/ipeds/cipcode/searchresults.aspx?y=55&aw=agroecology>

Classification of Instructional Programs (CIP) Code: 01.0308

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Certificate Submission Required Documents:

- Catalog copy - catalog-style description of the certificate, requirements for entry, requirements for completion, and a suggested semester-by-semester plan, prepared as a Microsoft Word document.
- Supporting documentation - memos, emails, etc. from other units to provide evidence of the availability of courses that are required for the certificate and/or to provide evidence for support of the proposed certificate if there is clear or potential overlap or duplication of content.

Bali,Sukhwinder Kaur

From: Rowland,Diane L
Sent: Friday, September 4, 2020 1:50 PM
To: Bali,Sukhwinder Kaur
Cc: Estrada,James
Subject: RE: Permission to include Agronomy courses, as an elective in Undergraduate Agroecology Certificate

Hello Sukhwinder,
I approve of the use of these courses in the Undergraduate Certificate.

I really don't think the department that will house the certificate (AGR) has to approve, though. I believe it is only the outside departments. Maybe I am wrong on this, but we've never had to do this before for the grad certificates that I remember.

Diane

From: Bali,Sukhwinder Kaur <sukhwinder.bali@ufl.edu>
Sent: Friday, September 4, 2020 11:39 AM
To: Rowland,Diane L <drowland@ufl.edu>
Cc: Estrada,James <estrada@ufl.edu>
Subject: Permission to include Agronomy courses, as an elective in Undergraduate Agroecology Certificate

Dear Dr. Rowland,

I am writing to request your permission to include a courses in your department ALS 4154 (Global Agroecosystems), ALS 4914 (Project Teams), AGR 4212 (Alternative Cropping Systems), IDS 2935 (Living and Eating on Earth), as an elective in our new Undergraduate Agroecology Certificate. The primary goal of the certificate is to provide students with an interdisciplinary, experiential learning opportunity in agricultural sciences. Thus, we are collaborating with UF Field and Fork to deliver hands-on research opportunities (at the UF Student Gardens) through our core courses. We feel that Agronomy courses would be a great fit as a classroom based elective in this initiative.

If you approve of adding Agronomy Courses [ALS 4154 (Global Agroecosystems), ALS 4914 (Project Teams), AGR 4212 (Alternative Cropping Systems), IDS 2935 (Living and Eating on Earth),] to this certificate, could you please forward us a brief official letter confirming this agreement? We have attached a draft version of the curriculum, along with a brief description of the certificate goals, for you to review.

Please feel free to contact me with any questions.

Sukhwinder Bali
Agroecology Program Liaison | Agronomy
G052 McCarty D
PO Box 110500
Gainesville, FL 32611

Sukhwinder Bali
Agroecology Program Liaison | Agronomy
G052 McCarty D
PO Box 110500
Gainesville, FL 32611

CALS Curriculum Committee Submission Checklist

NOTE: This checklist must be included with all course and certificate submissions.

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (<https://approval.ufl.edu/>). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as “Proposal of a new undergraduate course” is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

It is required when making a submission that you consult your department’s representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>.

You **MUST** comply with the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site(<https://cals.ufl.edu/faculty-staff/committees/>) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

Joint course submissions must include both graduate and undergraduate syllabuses and a separate statement outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

The course description on the UCC form and in the syllabus must match. Any other information you wish to include needs to be under a different heading such as background or additional information.

The course learning objectives must be consistent with Bloom’s taxonomy. Please see the following link at the CALS Curriculum site. (https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf). Do not use the words demonstrate or understand when listing learning objectives.

The course schedule should be concise and include the appropriate number of weeks in the semester.

☑ All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

☑ Outside consultations are required if there is a possibility of the proposed course covering material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://registrar.ufl.edu/pdf/ucccconsult.pdf>.

☑ Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be “none” or left blank. Junior or senior standing is an acceptable option. A phrase such as “a course in basic biology” is not acceptable.

☑ Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

☑ The attendance and make-up policy in a syllabus cannot contradict the university’s policy. Do not include any additional wording to this policy. A statement and link regarding this is included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

☑ The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Joel Brendemuhl (brendj@ufl.edu) for further instruction)

AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS

CERTIFICATE

The Agroecology and Sustainable Food Systems Certificate explores the natural and social systems that guide sustainable agriculture. It provides interdisciplinary training and hands-on field research to teach the principles and practices of agroecological production within the context of environmental, social, and economic challenges. It prepares students for graduate programs or professions utilizing systems-thinking skills.

ABOUT THIS PROGRAM

College: College of Agricultural and Life Sciences

Credits: 12

Certificate must contain six required credits, three credits from Natural Sciences and three from Social Sciences.

DEPARTMENT INFORMATION: <https://agronomy.ifas.ufl.edu/>

Current UF students, of Junior Status or higher may enroll.

REQUIRED COURSES

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number	Course Title	Credit Hours
ALS 4914	Project Teams	3
AGR 4212	Alternative Cropping Systems	3

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours
ALS 3153	Agricultural Ecology	3
ALS 4154	Global Agroecosystems	3
SWS 4207	Sustainable Agricultural and Urban Land Management	3
IDS 2935	Living and Eating on Earth	3

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours
AEB 3671	Comparative World Agriculture	3
AEB 4126	Agricultural and Natural Resource Ethics	3
ALS 3030C	Urban Agriculture	3
FYC 3521	Community Food Systems	3

AGROECOLOGY AND SUSTAINABLE FOOD SYSTEMS

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DEPARTMENT INFORMATION: <https://agronomy.ifas.ufl.edu/>

Current UF students, of Junior Status or higher may enroll.

REQUIRED COURSES

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number	Course Title	Credit Hours
ALS 4914	Project Teams	3
AGR 4212	Alternative Cropping Systems	3

AGR 4212 required credits (minimum of 3 and maximum of 6)

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours
ALS 3153	Agricultural Ecology	3
ALS 4154	Global Agroecosystems	3
SWS 4207	Sustainable Agricultural and Urban Land Management	3
IDS 2935	Living and Eating on Earth	3

ALS 4154 and SWS 4207 required credits (minimum of 3 and maximum of 6)

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours
AEB 3671	Comparative World Agriculture	3
AEB 4126	Agricultural and Natural Resource Ethics	3
ALS 3030C	Urban Agriculture	3
FYC 3521	Community Food Systems	3



College of Agricultural and Life Sciences
Entomology and Nematology Department

Steinmetz Hall, Bldg. 970
1881 Natural Area Drive
P.O. Box 110620
Gainesville, FL 32611-0620

September 8, 2020

Dr. Sukhwinder Bali
Agroecology Program Liaison | Agronomy
G052 McCarty D
PO Box 110500
Gainesville, FL 32611

Dear Dr. Bali,

I am writing to confirm that the Entomology and Nematology Department supports the addition of ALS 3153 as an elective in the new Undergraduate Agroecology Certificate. Please let me know if you require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Blair D. Siegfried', written in a cursive style.

Blair D. Siegfried
Professor and Chair
Department of Entomology and Nematology

Bali,Sukhwinder Kaur

From: Ivey,Kathryn Beaty
Sent: Wednesday, September 16, 2020 1:19 PM
To: Bali,Sukhwinder Kaur
Cc: Estrada,James; Irani,Tracy Anne; Stefanou,Candice R; Ivey,Kathryn Beaty
Subject: RE: Permission to include FYC 3521 (Family Youth & Community Science), as an elective in Undergraduate Agroecology Certificate.

Good afternoon, Dr. Bali:

I am responding to your email below to Dr. Irani regarding our FYC3521—Community Food Systems course and your new Agroecology Undergrad Certificate.

Dr. Irani and I have met with the instructor of the course as well as the Undergraduate Coordinator and we are in agreement to allow this course to be listed as an elective.

However, we would like to make you and your department aware of a few things:

- 1) This course is offered every other year, so it will not be offered again until Summer 2022.
- 2) We are in agreement for this course being listed as an elective as long as there are other options for students due to what was stated above.

Should you have additional questions, please do not hesitate to reach out to Dr. Irani and myself.

Have a great day.

Kind regards,
Kathryn

[Kathryn B. Ivey](#)



Kathryn B. Ivey, Academic Advisor 1, Family, Youth and Community Sciences
M.S. Student--Agricultural Education and Communications
University of Florida - P.O. Box 110310/ 3041 McCarty Hall D, Gainesville, FL 32611
(352) 273-3532; [*kbeaty@ufl.edu](mailto:kbeaty@ufl.edu); <http://fycs.ifas.ufl.edu/>

Advance Notice: None at this time.

Schedule an appointment with me:

<https://app.acuityscheduling.com/schedule.php?owner=13802233&calendarID=1273459>

CONFIDENTIALITY NOTICE: The information contained in this electronic message is confidential and intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this email or any of its components is strictly prohibited. If you have received this email in error, please "reply" to the sender.

From: "Bali,Sukhwinder Kaur" <sukhwinder.bali@ufl.edu>

Date: September 4, 2020 at 9:48:06 AM EDT

To: "Irani,Tracy Anne" <irani@ufl.edu>

Cc: "Estrada,James" <estrada@ufl.edu>

Subject: **Permission to include FYC 3521 (Family Youth & Community Science), as an elective in Undergraduate Agroecology Certificate.**

Dear Dr. Irani,

I am writing to request your permission to include a course in your department, FYC 3521 (Family Youth & Community Science), as an elective in our new Undergraduate Agroecology Certificate. The primary goal of the certificate is to provide students with an interdisciplinary, experiential learning opportunity in agricultural sciences. Thus, we are collaborating with UF Field and Fork to deliver hands-on research opportunities (at the UF Student Gardens) through our core courses. We feel that FYC 3521 would be a great fit as a classroom based elective in this initiative.

If you approve of adding , FYC 3521 (Family Youth & Community Science), to this certificate, could you please forward us a brief official letter confirming this agreement? We have attached a draft version of the curriculum, along with a brief description of the certificate goals, for you to review.

Please feel free to contact me with any questions.

Sukhwinder Bali
Agroecology Program Liaison | Agronomy
G052 McCarty D
PO Box 110500
Gainesville, FL 32611

Bali,Sukhwinder Kaur

From: Prizzia,Anna
Sent: Friday, September 4, 2020 11:24 AM
To: Estrada,James; Bali,Sukhwinder Kaur; Rowland,Diane L; Liebowitz,Dina M
Subject: Re: Permission to include Agronomy courses, as an elective in Undergraduate Agroecology Certificate.

We look forward to participating with the Urban Agriculture course!

Anna

From: Estrada,James <estradaej@ufl.edu>
Sent: Friday, September 4, 2020 10:52 AM
To: Bali,Sukhwinder Kaur <sukhwinder.bali@ufl.edu>; Rowland,Diane L <drowland@ufl.edu>
Cc: Prizzia,Anna <aprizzia@ufl.edu>
Subject: RE: Permission to include Agronomy courses, as an elective in Undergraduate Agroecology Certificate.

Hi Sukhwinder,

Agricultural Ecology is in Entomology. And Urban Agriculture is fun by Field and Fork – you should contact Anna Prizzia for that class (aprizzia@ufl.edu)

James

From: Bali,Sukhwinder Kaur <sukhwinder.bali@ufl.edu>
Sent: Friday, September 4, 2020 9:40 AM
To: Rowland,Diane L <drowland@ufl.edu>
Cc: Estrada,James <estradaej@ufl.edu>
Subject: Permission to include Agronomy courses, as an elective in Undergraduate Agroecology Certificate.

Dear Dr. Rowland,

I am writing to request your permission to include a courses in your department, ALS 3153 (Agricultural Ecology), ALS 4154 (Global Agroecosystems), ALS 4914 (Project Teams), AGR 4212 (Alternative Cropping Systems), ALS 3030C (Urban Agriculture), IDS 2935 (Living and Eating on Earth), as an elective in our new Undergraduate Agroecology Certificate. The primary goal of the certificate is to provide students with an interdisciplinary, experiential learning opportunity in agricultural sciences. Thus, we are collaborating with UF Field and Fork to deliver hands-on research opportunities (at the UF Student Gardens) through our core courses. We feel that Agronomy courses would be a great fit as a classroom based elective in this initiative.

If you approve of adding Agronomy Courses [ALS 3153 (Agricultural Ecology), ALS 4154 (Global Agroecosystems), ALS 4914 (Project Teams), AGR 4212 (Alternative Cropping Systems), ALS 3030C (Urban Agriculture), IDS 2935 (Living and Eating on Earth),] to this certificate, could you please forward us a brief official letter confirming this agreement? We have attached a draft version of the curriculum, along with a brief description of the certificate goals, for you to review.

Please feel free to contact me with any questions.

Sukhwinder Bali
Agroecology Program Liaison | Agronomy
G052 McCarty D
PO Box 110500
Gainesville, FL 32611



UF/IFAS
Food and Resource Economics Department
Lisa A. House
Professor and Chair

1171 McCarty Hall A
PO Box 110240
Gainesville, FL 32611-0240
lahouse@ufl.edu
1.352.294.7653

September 23, 2020

To whom it may concern:

The Food and Resource Economics Department supports the inclusion of AEB 3671, Comparative World Agriculture, and AEB 4126, Agricultural and Natural Resource Ethics in the Undergraduate Agroecology Certificate. I believe both courses include material that would support the goals of the certificate and both courses are taught regularly in fall and spring semester for students to take.

Sincerely,

A handwritten signature in cursive script that reads 'Lisa House'.

Lisa House
Professor and Chair
Food and Resource Economics

External Consultation Results (departments with potential overlap or interest in proposed course, if any)

Department	Name and Title
_____	_____
Phone Number	E-mail
_____	_____
Comments	

Department	Name and Title
_____	_____
Phone Number	E-mail
_____	_____
Comments	

Department	Name and Title
_____	_____
Phone Number	E-mail
_____	_____
Comments	

Proposed curriculum

1. Required Core Courses. All courses are letter-graded (6 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
ALS 4914	Project Teams	3	Fall	None
AGR 4212	Alternative Cropping Systems	3	Spring	None

2. Choose one elective based on area of interest from the Natural Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
ALS 3153	Agricultural Ecology	3	Spring + Fall	None
ALS 4154	Global Agroecosystems	3	Spring	SWS3022, AGR 4214C, ALS 3153
SWS 4207	Sustainable Agricultural and Urban Land Management	3	Fall	SWS 3022
IDS 2935	Living and Eating on Earth	3	Fall	None

3. Choose one elective based on area of interest from the Social Sciences List below. All courses are letter-graded (3 credits).

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
AEB 3671	Comparative World Agriculture	3		
AEB 4126	Agricultural and Natural Resource Ethics	3		junior or senior standing
ALS 3030C	Urban Agriculture	3		sophomore standing
FYC 3521	Community Food Systems	3	Summer	Junior Standing

Additional courses for future consideration

Natural Sciences

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
FOR 4854	Agroforestry	3	Spring	None
SWS 4116	Environmental Nutrient Management	3	Fall + Spring	SWS 3022

SWS 4231	Soil, Water, and Land Use	3		
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Social Sciences

Course Number	Course Title	Credit Hours	Semester Offered	Pre-requisites
AEB 2014	Economic Issues, Food, and You	3	Fall	None
AEB 3103	Principles of Food and Resource Economics	4		MAC 2233 / MAC 2311 or higher.
GEO 3315	Geography of Crop Plants	3		

Soil and Water Science Department



2181 McCarty Hall A
PO Box 110290
Gainesville, FL 32611-0290
(352) 294-3154
(352) 392.3399 Fax

September 7, 2020

Dr. Sukhwinder Bali
Agroecology Program Liaison
Department of Agronomy
University of Florida
Gainesville, FL 32611

Dear Dr. Bali,

This letter is to express the support of the Soil and Water Sciences Department for the inclusion of SWS 4207 (Soils) as an elective in the new Undergraduate Agroecology Certificate Program. I have examined the curriculum and the certificate goals, and I agree that SWS 4207 is a very appropriate option for this new program.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Whiles".

Dr. Matt R. Whiles
Chair and Professor
Soil and Water Sciences Department
Institute of Food and Agricultural Sciences