## **PROGRAM REQUEST**

Last Updated: Pfister, Jill Ann 01/14/2011 Landscape Construction Minor

Fiscal Unit/Academic Org

Status: PENDING

Administering College/Academic Group Co-adminstering College/Academic Group

Semester Conversion Designation

Food, Agric & Biological Eng - D1123 Food, Agric & Environ Science

Re-envisioned with significant changes to program goals and/or curricular requirements (e.g., degree/major name changes, changes in program goals, changes in core requirements, structural

changes to tracks/options/courses)

**Current Program/Plan Name Proposed Program/Plan Name** Program/Plan Code Abbreviation

**Current Degree Title** 

Landscape Construction Minor Landscape Construction Minor

LNDCONS-MN

## **Credit Hour Explanation**

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours completion of progr		23	15.3	15	0.3
Required credit hours offered by the unit	Minimum	23	15.3	13	2.3
	Maximum	25	16.7	16	0.7
Required credit hours offered outside of the unit	Minimum	0	0.0	0	0.0
	Maximum	0	0.0	3	3.0
Required prerequisite credit hours not included above	Minimum	9	6.0	9	3.0
	Maximum	9	6.0	9	3.0

## **Program Learning Goals**

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

#### **Program Learning Goals**

- to provide students with a basic understanding of the principles and methods used in planning and managing the construction of modern landscapes and related facilities
- to train students to perform landscape construction activities at private residences, commercial properties, sport fields, golf courses, parks, and other recreational areas.

#### Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

## Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Status: PENDING PROGRAM REQUEST Last Updated: Pfister, Jill Ann Landscape Construction Minor 01/14/2011

## **Pre-Major**

Does this Program have a Pre-Major? No

### **Attachments**

• Landscape\_Construction\_Minor\_Ver\_19\_Dec\_10.pdf: Semester advisor sheet

(Semester Advising Sheet(s). Owner: Kaletunc, Gonul)

• landconst705 minor quarter advising sheet.pdf: Quarter advisor sheet

(Quarter Advising Sheet(s). Owner: Kaletunc, Gonul)

• Landscape Minor FABE Chair letter.pdf: Chair letter

(Letter from Program-offering Unit. Owner: Kaletunc, Gonul)

## **Comments**

## **Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Kaletunc,Gonul	12/28/2010 12:24 PM	Submitted for Approval
Approved	Kaletunc,Gonul	12/31/2010 09:45 AM	Unit Approval
Approved	Pfister,Jill Ann	01/14/2011 05:26 PM	College Approval
Pending Approval	Hanlin,Deborah Kay Vankeerbergen,Bernadet te Chantal Meyers,Catherine Anne Jenkins,Mary Ellen Bigler Nolen,Dawn	01/14/2011 05:26 PM	ASCCAO Approval



# Department of Food, Agricultural And Biological Engineering

590 Woody Hayes Drive Columbus, OH 43210-1057

Phone +1-614-292-9338 FAX +1-614-292-9448 Email <sastry.2@osu.edu>

28 December 2010

Dr. Jill Pfister
Assistant Dean, Academic Affairs
College of Food, Agricultural and Environmental Sciences
100 Agricultural Administration Building
2120 Fyffe Rd
Campus

Dear Dr. Pfister

On behalf of the faculty of the Department of Food, Agricultural, and Biological Engineering, I am pleased to submit the semester conversion proposal for the Landscape Construction minor program. The Department of Food, Agricultural, and Biological Engineering will continue to offer the Landscape Construction minor program after the conversion to semesters but with a curriculum that is significantly revised from the current quarter based curriculum. This minor is one of two minors currently offered by the Department of Food, Agricultural, and Biological Engineering and, with the proposed revision, consists of courses from both Construction Systems Management (CSM) and the Agricultural Systems Management (ASM), programs offered in the department. A brief history of this minor and a discussion of the revisions follow. Advising sheets for the proposed semester curriculum and the current quarter curriculum are attached.

The Landscape Construction Minor was developed several years ago at the request of the Department of Horticulture and Crop Science to support their Landscape Horticulture major. A team of faculty from each department met and proposed what is the current Landscape Construction minor. The objective of the minor was to provide Landscape Horticulture students knowledge and skills related to the construction techniques and methods required in the landscape industry. Because of the prerequisite structure of potentially relevant CSM courses, a minor that consisted of only ASM courses as shown in the attached quarter-based curriculum sheet was considered to be more suitable for students with the Landscape Horticulture background. Although the minor, currently offered in quarter system, provided a good background in the technology and systems used in constructing landscapes, it lacked some of the basic skills and knowledge needed to manage the construction process. Therefore, during quarter-to-semester conversion, faculty from the Departments of the Horticulture and Crop Science and have met to address these issues.

The proposed semester curriculum for the Landscape Construction minor jointly developed by faculty from both departments is attached. The development and implementation of an Introduction to CSM (CSM 1205) course by the department of Food, Agricultural, and Biological Engineering and the inclusion of more graphics and computers into the Landscape Horticulture major have made it possible to include a good introduction to the basic skills and knowledge used in managing construction which is not addressed in the minor currently offered. In particular, CSM 1205 provides an overview of the construction industry and discusses an introduction to concepts essential to successful construction management including reading blueprints, estimating, scheduling, interpreting construction documents and contracts, determining rates of production. CSM 2440 Construction Surveying and Site Development comprise a discussion of topics on surveying techniques and technology used in construction, the engineering properties of soils, laying out construction sites, preventing runoff from these sites, all of which are useful in installation of landscaping. CSM 2241 and ASM 3232 provide hands on skills and knowledge on materials, methods and equipment relevant to landscape construction.

A semester version of ASM 576 Water Management in the Landscape Environment would be a an excellent course for this minor. ASM 576 will continue to be an elective rather than a required course for the minor in the semester program. However, if the current low enrollment trend observed in quarter system continues, it will not be feasible to justify offering of the course under semesters. Therefore the more general course Applied Agricultural Water Management, ASM 4575, is proposed instead. This course is required in the ASM program and will have the enrollment required to sustain it regardless of the demand for it as a course in the Landscape Construction minor. All of the courses in the proposed semester curriculum are required in their respective programs. The ASM courses will be offered once a year and the CSM courses will be offered in both autumn and spring semesters and possibly summer if there is sufficient demand.

The Department of Food, Agricultural, and Biological Engineering is pleased to offer this minor in support of the Landscape Horticulture program and to other students who may be interested in constructing landscapes. If the proposed revision is approved, the department intends to stay in close contact with the Landscape Horticulture program to ensure the best possible curriculum will be available to the students enrolled in Landscape Construction minor program.

Sincerely,

**Sudhir Sastry** 

Professor and Interim Chair

#### **LANDSCAPE CONSTRUCTION MINOR (244)**

College of Food, Agricultural, and Environmental Sciences The Ohio State University Mike Lichtensteiger, Coordinating Adviser 216 Agricultural Engineering 590 Woody Hayes Drive 292-9351

lichtensteiger.2@osu.edu

The Landscape Construction Minor is designed to provide students with a basic understanding of the principles and methods used in the planning, construction and management of the structures and other facilities that used in modern landscapes. These landscape activities are performed at private residences (in urban, suburban and rural settings), commercial properties, sport fields and golf courses, as well as parks and other recreational areas. The minor is designed for students interested in landscape development and management as represented by majors such as Crop Science, Landscape Architecture, Landscape Horticulture, Natural Resources and Turfgrass Science.

The Landscape Construction minor consists of 23-25 credit hours. Six required courses (20 hours) provide a basic foundation in construction materials, techniques and equipment, and the technology used in the landscape environment. The remaining three to five hours allows the minor to be tailored to the student's specific area of interest.

Required: 20 hours		<b>Credit Hours</b>
AGSYSMGT 232	Small Air-Cooled Engines	4
AGSYSMGT 241	Building Materials and Construction in Agriculture	4
AGSYSMGT 310	Electric Power for Agricultural and Residential Applications	3
AGSYSMGT 370	Principles of Hydrology	3
AGSYSMGT 371	Land Surveying for Agricultural and Environmental Systems	2
AGSYSMGT 576	Water Management in Landscape Environment	4
Elective Courses - Select three	- five hours from the following courses:	
AGSYSMGT 240	Basic Metal Fabrication for Agriculture	4
AGSYSMGT 320	Facilities for Agricultural and Greenhouse Production	5
AGSYSMGT 360	Agricultural Machine Principles	5
AGSYSMGT 550	Pollution Control and Waste Utilization	4
AGSYSMGT 600	Agricultural Safety and Health	3

#### **Restrictions and General Information**

- 1. This minor is not available to students majoring in Agricultural Systems Management, Construction Systems Management, or Agricultural and Construction Systems Management.
- 2. A minimum overall CPHR for courses comprising the minor shall be 2.0.
- 3. A minor should be declared at the time a student accumulates 90 hours.
- 4. A maximum of five credit hours may overlap between the minor and the GEC (foundations, natural sciences, arts and humanities and social sciences).
- 5. Courses taken on a pass/non pass basis may not be applied to the minor.

3/28/08

#### **Landscape Construction Minor (244)**

College of Food, Agricultural, and Environmental Sciences
The Ohio State University

Michael Lichtensteiger, Coordinating Adviser 216 Agricultural Engineering 590 Woody Hayes Drive 292-9351 Lichtensteiger.2@osu.edu

The Landscape Construction Minor is designed to provide students with a basic understanding of the principles and methods used in planning and managing the construction of modern landscapes and related facilities. These landscape construction activities are performed at private residences (in urban, suburban and rural settings), commercial properties, sport fields and golf courses, as well as parks and other recreational areas. The minor is designed for students interested in landscape development and management as represented by majors and specializations such as Landscape Architecture, Sustainable Plant Systems, Landscape Management and Design, and Turfgrass Science.

The Landscape Construction minor consists of 15-16 credit hours (12-13 credit hours at the 2000-level and above). Four required courses (13 credit hours) provide a basic foundation in construction management and the materials, methods and equipment used for constructing landscapes. The remaining two to three hours are selected based on student interests and career goals.

Required: 13 credit hours Credi	t Hours
---------------------------------	---------

CONSYSMT 1205	Introduction to Construction Systems Management	3
CONSYSMT 2241	Construction Materials and Methods II	3
CONSYSMT 2440	Construction Surveying and Site Development	4
AGSYSMGT 3232	Engines and Power Transmission	3

#### **Elective Courses: Select one from the following courses:**

AED ECON 2105 <sup>1</sup>	Managerial Records and Analysis	3
AGSYSMGT 4575	Applied Agricultural Water Management	2
CONSYSMT 2600	Construction Safety and Health	3
CONSYSMT 4660	Heavy Construction Management	3
CONSYSMT 5670	Green Building and Sustainable Construction	3

#### **Restrictions and General Information**

- 1. This minor is not available to students majoring in Construction Systems Management.
- 2. A minimum overall GPA for courses comprising the minor shall be 2.00.
- 3. A minor should be declared by the time a student accumulates 60 hours.
- 4. A maximum of one course may overlap between the minor and the GEC (Writing, Literature, Arts, Natural Sciences, Historical Study, Social Sciences, Culture and Ideas, Contemporary Issues).
- 5. Courses taken on a pass/non pass basis may not be applied to the minor.
- 6. For students majoring in the College of Arts and Sciences, a grade of C- or better must be earned in all courses counted toward this or any minor.

<sup>&</sup>lt;sup>1</sup>This course may go in the minor equivalent if possible. Included here until that decision is made.