Cover Sheet: Request 13588

Agricultural Operations Management change to required courses

Info

Process	Major Curriculum|Modify|Ugrad/Pro
Status	Pending at PV - University Curriculum Committee (UCC)
Submitter	Wendell Porter waporter@ufl.edu
Created	2/6/2019 2:23:37 PM
Updated	3/25/2019 10:36:15 AM
Description of request	Three changes to existing course requirements are proposed. There are additional changes to the Transfer Guide.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CALS - Agricultural Operations Management 514907001	Wendell Porter		2/6/2019
CALS Curriculum Changes 2019.doc					2/6/2019
College	Approved	CALS - College of Agricultural and Life Sciences	Joel H Brendemuhl	Approved by CALS CC at the 2/15/19 meeting.	2/21/2019
No document changes					
Associate Provost for Undergraduate Affairs	Approved	PV - Associate Provost for Undergraduate Affairs	Casey Griffith		2/21/2019
No document changes					
University Curriculum Committee	Commented	PV - University Curriculum Committee (UCC)	Lee Morrison	Added to March 3-26 agenda.	3/21/2019
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			3/21/2019
No document changes					
Office of the Registrar					
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					

Major|Modify_Curriculum for request 13588

Info

Request: Agricultural Operations Management change to required courses
Description of request: Three changes to existing course requirements are proposed. There are additional changes to the Transfer Guide.
Submitter: Wendell Porter waporter@ufl.edu
Created: 3/4/2019 10:50:56 AM
Form version: 2

Responses

Major Name Agricultural Operations Management
Major Code AOM
Degree Program Name Agricultural Operations Management
Undergraduate Innovation Academy Program No
Effective Term Earliest Available
Effective Year Earliest Available
Current Curriculum for Major The current AOM curriculum includes PSY2012 Introduction to Psychology. This course was in the curriculum years ago due to a stronger focus on human resources for one of our specializations.
The AOM program currently includes both ALS3133 Agriculture and Environmental Quality and SWS3022 Introduction to Soils.
The AOM curriculum requires both ECO2013 and ECO2023 and allows AEB2014 to be a substitute.
Proposed Curriculum Changes The PSY2012 course will be deleted due and replaced with one of CGS1100, CGS1101, or CGS2531. Our industry focus group and conversation with additional stakeholders strongly suggest a better foundation in computer technologies.
The AOM major is the only major that currently requires both ALS3133 and SWS3022. There is some overlap in these courses and we recommend that our students take one or the other and use the additional hours to support a GIS course; DCP2001 Introduction to GIS. This will better support our academic efforts in Precision Agriculture.
Our College requires that our students take one of ECO2013, ECO2023 or AEB2014. This change aligns our degree requirements with the College. We will add our new Agri-Food Systems Innovations course, AOM4932.
Pedagogical Rationale/Justification We reviewed our entire program and included input from our industry advisory group to help support a better foundation in two key areas of our program: precision agriculture and food security. Additional details in attached documentation.
Impact on Enrollment, Retention, Graduation These changes will affect new students as requirements and current students only as options if desired.
Assessment Data Review These changes will not add or detract to our current SLO's at this time.
Academic Learning Compact and Academic Assessment Plan No changes are planned

Agricultural Operations Management

Proposed Changes 2018-2019

To remain on track, students must complete the appropriate critical-tracking courses, which appear in bold. These courses must be completed by the terms as listed above in the Critical Tracking criteria.

This semester plan represents an example progression through the major. Actual courses and course order may be different depending on the student's academic record and scheduling availability of courses. Prerequisites still apply.

Plan of Study Grid

Semester One		Credits
Select one:		3-4
BSC 2010 & 2010L	Integrated Principles of Biology 1 and Integrated Principles of Biology Laboratory 1 (**Critical Tracking**)	3-4
BOT 2010C	Introductory Botany (**Critical Tracking**; Gen Ed Biological Sciences)	
IUF 1000	What is the Good Life (Gen Ed Humanities)	3
Select one:		3-4
MAC 1147	Precalculus Algebra and Trigonometry (**Critical Tracking**; State Core Gen Ed Mathematics)	
MAC 2233	Survey of Calculus 1 (**Critical Tracking**; State Core Gen Ed Mathematics)	
State Core Gen Ed Composition; Writing Requirement; with Diversity or International		3
Elective		1
	Credits	13-145
Semester Two		
Select one:		4
ACG 2021	Introduction to Financial Accounting (**Critical Tracking**)	4
Advisor-approved alternative (**Critical Tracking**)		
CHM 2045 & 2045L	General Chemistry 1 and General Chemistry 1 Laboratory (**Critical Tracking**; State Core Gen Ed Physical Sciences)	4
STA 2023	Introduction to Statistics 1 (Gen Ed Mathematics)	3
State Core Gen Ed Humanities with Diversity or International		3

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Gen Ed Physical Sciences		3
	Credits	17

	Semester Three	
AOM 2520	Global Sustainable Energy: Past, Present and Future	3
Select one:		3-4
AEB 2014	Economic Issues, Food and You	
ECO 2013	Principles of Macroeconomics (Gen Ed Social and Behavioral Sciences)	
ECO 2023	Principles of Microeconomics	
Select one:		4
PHY 2004 & 2004L	Applied Physics 1 and Laboratory for Applied Physics 1 (**Critical Tracking**; Gen Ed Physical Sciences)	
PHY 2020 & PHY 2004L	Introduction to Principles of Physics and Laboratory for Applied Physics 1 (**Critical Tracking**; Gen Ed Physical Sciences)	
Select one:		3
PSY 2012CGS2531	Problem Solving Using Computer Software (**Critical Tracking**) General Psychology (**Critical Tracking**; State Core Gen Ed Social and Behavioral Sciences)	3
CGS1100	Microcomputer Applications (**Critical Tracking**)	
CGS1101	Introduction to Computer Applications for Business (**Critical Tracking**)	
	Credits	13-14

	Semester Four	
Select one:		3
AEC 3030C	Effective Oral Communication (**Critical Tracking**)	
SPC 2608	Introduction to Public Speaking (**Critical Tracking**)	
ENC 2210	Technical Writing (**Critical Tracking**; Gen Ed Composition)	3
Select one:		4
ECO 2023AOM4932	Agri-Food Systems Innovation Principles of Microeconomics [1]	3
GE Social Science	General Education Social Science course	3
Approved electives		
Approved elective		3
	Credits	13152

Semester Five

AEB 3300 or MAR 3023	Agricultural and Food Marketing or Principles of Marketing	3-4
AEB 3133 or MAN 3025	Principles of Agribusiness Management or Principles of Management	3-4
AOM 3220	Agricultural Construction and Maintenance	3
AOM 3333	Pesticide Application Techniques	3
Approved elective		3
	Credits	15-17

Summer After Semester Five

AOM 3734	Irrigation Principles and Practices in Florida	3
	Credits	3

Semester Six

ALS 3133 or AOM 4521 or SWS 3022	Agricultural and Environmental Quality or Introduction to Biofuels or Introduction to Soils in the Environment	3
AOM 4314C	Power and Machinery Management	3
SWS 3022DCP2001	Introduction to GIS 1Introduction to Soils in the Environmentd	3
AOM 4933	Professional Practices in Agricultural Operations Management	1
Approved electives		6
	Credits	1516

Semester Seven

Select one business law, ethics, or human resources course:		3-4
AEB 4085	Agricultural Risk Management and the Law	
AEB 4123	Agricultural and Natural Resource Law	
AEB 4126	Agricultural and Natural Resource Ethics	
BUL 4310	The Legal Environment of Business	
AOM 4642	Environmental Systems for Agricultural Structures	3
AOM 4643	Environmental Hydrology: Principles and Issues	3
Approved electives		6
	Credits	156-167

Semester Eight

AOM 4434	Precision Agriculture	3
AOM 4444C	Electrical Power and Instrumentation for Agricultural Operations Management	3
AOM 4455	Agricultural Operations and Systems	3

AOM 4461	Sustainable Agricultural Systems	3
Approved elective		312
	Credits	15134
	Total Credits	120

UF UNIVERSITY *of* FLORIDA

Institute of Food and Agricultural Sciences
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February 6, 2019

Dear CALS Curriculum Committee,

The AOM program has undertaken a formal review of the entire program. This review has incorporated input from industry partners, AOM alumni, internal and external faculty. We are planning a number of changes to the AOM curriculum to better reflect the needs of both the students and industry in the future. The first series of planned changes have been reviewed by AOM faculty, the department curriculum committee and the department Chair. These changes are:

1. Delete PSY2012, Introduction to Psychology and replace with one of: CGS1100, CGS1101 or CGS2531. It was almost a universal agreement that our students needed better preparation in the area of computer based applications.
2. Choose one of ALS3133, Agriculture and Environmental Quality or SWS3022, Introduction to Soils in the Environment, not both. Replace the deleted course with DCP2001, Introduction to GIS. We have consulted with DCP and they are supportive of our plans. We plan on enhancing our elective course in the Precision Agriculture area. A GIS introduction course will give our students a better foundation.
3. Delete requirement to take both ECO2013 and 2023 and replace with a requirement to take one of: ECO2013, ECO2023, or AEB2014. Replace the deleted course with our new AOM core course: AOM4932 Agri-Food Systems Innovation.

Also, due to lower division issues at UF, we would like to make the following changes to our Transfer Guide and change the text to reflect that we no longer have a 6 of 8 requirement for transfer courses:

> **Require** the following 6 courses:
> CHM2045 and lab
> PHY2004 or PHY2020 and an applied physics lab
> MAC1147 or
> MAC1140 & 1114

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BSC2010 and lab
ENC2210
ACG2021

The following courses are suggested to be taken before transfer but are not absolutely required before transfer:

Other courses required in the AOM major that are recommended before transfer:
SPC2608
STA2023
ECO2013 or ECO2023
CGS1100, 1101 or 2531
MAR3023
MAN3025

Track changes versions of our 8 semester plan and our Transfer Guide are included with this memo.

Sincerely,

Dr. Wendell A. Porter, P.E.
Sr. Lecturer and Adviser
Agricultural & Biological Engineering
University of Florida

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AGRICULTURAL OPERATIONS MANAGEMENT

Agricultural Operations Management (AOM) combines emerging technologies with business principles to allow students to apply cutting edge techniques to a wide variety of career paths. Students gain technical expertise in systems management, environmental quality, energy efficiency, agricultural construction management, machinery, GIS/GPS remote sensing, safety, irrigation, power systems, water control and food processing. Students select a concentration based on their interest area.

The curriculum supports students who plan to seek career opportunities in commercial business operations and management. In addition to hands-on applied skills, students will take courses in economics, accounting, business, finance and management. Graduates become an integral part of the profitable operations of many types of businesses, such as agricultural production facilities, grove management, commercial nurseries, construction management and materials, regulatory agencies and citrus processing.

Students must complete an Associate of Arts degree, meet the required grade point average (G.P.A.), complete the required prerequisite courses, and meet the foreign language and immunization policies of the University of Florida before transferring.

Agricultural Operations Management

Required G.P.A. = 2.0 overall and 2.0 in the following courses.

Students MUST complete~~complete 6 of the 8~~ all of the courses listed below ~~and include technical writing, math, chemistry and physics.~~ prior to transfer with an AA degree.

MAC 2233 Survey of Calculus 1 3

or MAC 1147 Precalculus 4

or MAC 1140 & MAC 1114 Precalculus Algebra and Trig 6

CHM 2045 & 2045L General Chemistry 1 and Lab 4

PHY 2004 Applied Physics 1 3

or PHY 2020 Introduction to Principles of Physics 3

ENC 2210 Technical Writing 3

BSC 2010/2010L General Biology 1 and Lab 4

~~SPC 2608 Introduction to Public Speaking 3~~

~~ENC 2210 Technical Writing 3~~

ACG 2021 Introduction to Financial Accounting 4

~~PSY 2012 General Psychology 3~~

The following courses may be completed at the community/state college, but are not required for admission to the College of Agricultural and Life Sciences:

ECO 2013 Macroeconomics **or** ECO 2023 Microeconomics 3

~~ECO 2023 Microeconomics 3~~

STA 2023 Introduction to Statistics 1 3

SPC 2608 Public Speaking

STA 2023 Introduction to Statistics 1

CGS 1100, 1101 or 2531 Microsoft Applications (or equivalent)

MAR 3023 Principles of Marketing

MAN 3025 Principles of Management

Find the academic adviser and website for this major at www.cals.ufl.edu/undergraduate