

# 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	4/12/2019 1:46:35 PM
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	Tabled	PV - University Curriculum Committee (UCC)	Casey Griffith	Tabled for April meeting	3/26/2019
AOM2018-2019 rev 03 25.docx					3/25/2019
CALS Transfer Guide 2019-Proposed changes for AOM 03 25.docx					3/25/2019
University Curriculum Committee	Commented	PV - University Curriculum Committee (UCC)	Lee Morrison	Added to April agenda.	4/12/2019
No document changes					
University Curriculum Committee	Tabled	PV - University Curriculum Committee (UCC)	Casey Griffith	Tabled for May meeting.	4/12/2019
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			4/12/2019
No document changes					
Office of the Registrar					

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					

# 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		Credits
Semester One		
Select one: <a href="#">BSC 2010</a>	Integrated Principles of Biology 1	3-4
†& <a href="#">2010L</a> <a href="#">BOT 2010C</a>	†and Integrated Principles of Biology Laboratory 1 ( <b>Critical Tracking</b> ) Introductory Botany ( <b>Critical Tracking</b> ; Gen Ed Biological Sciences)	
- <a href="#">IUF 1000</a>	What is the Good Life (Gen Ed Humanities)	3
- Select one: <a href="#">MAC 1147</a>  <a href="#">MAC 2233</a>	Precalculus Algebra and Trigonometry ( <b>Critical Tracking</b> ; State Core Gen Ed Mathematics) Survey of Calculus 1 ( <b>Critical Tracking</b> ; State Core Gen Ed Mathematics)	3-4
- <a href="#">State Core Gen Ed Composition</a> ; Writing Requirement; with Diversity or International		3
	Credits	13-14
Semester Two		
Select one: <a href="#">ACG 2021</a>	Introduction to Financial Accounting ( <b>Critical Tracking</b> )	4
Advisor-approved alternative ( <b>Critical Tracking</b> ) <a href="#">CHM 2045</a>	General Chemistry 1	
†& <a href="#">2045L</a>	†and General Chemistry 1 Laboratory ( <b>Critical Tracking</b> ; State Core Gen Ed Physical Sciences)	4
<a href="#">STA 2023</a>	Introduction to Statistics 1 (Gen Ed Mathematics)	3
<a href="#">State Core Gen Ed Humanities with Diversity or International</a> Gen Ed Physical Sciences		3 3
	Credits	17
Semester Three		
<a href="#">AOM 2520</a>	Global Sustainable Energy: Past, Present and Future	3
- Select one: <a href="#">AEB 2014</a> <a href="#">ECO 2013</a> <a href="#">ECO 2023</a>	Economic Issues, Food and You Principles of Macroeconomics (Gen Ed Social and Behavioral Sciences) Principles of Microeconomics	3-4
Select one: <a href="#">PHY 2004</a>	Applied Physics 1	4
†& <a href="#">2004L</a>	†and Laboratory for Applied Physics 1 ( <b>Critical Tracking</b> ; Gen Ed Physical Sciences)	
<a href="#">PHY 2020</a>	Introduction to Principles of Physics	
†& <a href="#">PHY 2004L</a>	†and Laboratory for Applied Physics 1 ( <b>Critical Tracking</b> ; Gen Ed Physical Sciences)	

Select one:		3
CGS2531	Problem Solving Using Computer Software ( <b>Critical Tracking</b> )	
CGS1100	Microcomputer Applications ( <b>Critical Tracking</b> )	
CGS1101	Introduction to Computer Applications for Business ( <b>Critical Tracking</b> )	
	Credits	13-14
	<b>Semester Four</b>	
Select one:		3
<a href="#">AEC 3030C</a>	Effective Oral Communication ( <b>Critical Tracking</b> )	
<a href="#">SPC 2608</a>	Introduction to Public Speaking ( <b>Critical Tracking</b> )	
-		
<a href="#">ENC 2210</a>	Technical Writing ( <b>Critical Tracking</b> ; Gen Ed Composition)	3
		-
AOM4932	Agri-Food Systems Innovation	3
GE Social Science	General Education Social Science course	3
Approved elective		3
	Credits	15
	<b>Semester Five</b>	
<a href="#">AEB 3300</a>	Agricultural and Food Marketing	3-4
or <a href="#">MAR 3023</a>	or Principles of Marketing	
<a href="#">AEB 3133</a>	Principles of Agribusiness Management	3-4
or <a href="#">MAN 3025</a>	or Principles of Management	
<a href="#">AOM 3220</a>	Agricultural Construction and Maintenance	3
<a href="#">AOM 3333</a>	Pesticide Application Techniques	3
Approved elective		3
	Credits	15-17
	<b>Summer After Semester Five</b>	
<a href="#">AOM 3734</a>	Irrigation Principles and Practices in Florida	3
	Credits	3
	<b>Semester Six</b>	
<a href="#">ALS 3133</a>	Agricultural and Environmental Quality	
or <a href="#">AOM 4521</a>	or Introduction to Biofuels	3
or SWS 3022	or Introduction to Soils in the Environment	
-		
<a href="#">AOM 4314C</a>	Power and Machinery Management	3
DCP2001	Introduction to GIS 1d	3
AOM 4933	Professional Practices in Agricultural Operations	1
Management		
Approved electives		6
	Credits	16
	<b>Semester Seven</b>	
Select one business law, ethics, or human resources course:		3-4
<a href="#">AEB 4085</a>	Agricultural Risk Management and the Law	
<a href="#">AEB 4123</a>	Agricultural and Natural Resource Law	
<a href="#">AEB 4126</a>	Agricultural and Natural Resource Ethics	
<a href="#">BUL 4310</a>	The Legal Environment of Business	
-		
<a href="#">AOM 4642</a>	Environmental Systems for Agricultural Structures	3
<a href="#">AOM 4643</a>	Environmental Hydrology: Principles and Issues	3
Approved electives		6
	Credits	15-16
	<b>Semester Eight</b>	
<a href="#">AOM 4434</a>	Precision Agriculture	3
<a href="#">AOM 4444C</a>	Electrical Power and Instrumentation for Agricultural Operations Management	3
<a href="#">AOM 4455</a>	Agricultural Operations and Systems	3
<a href="#">AOM 4461</a>	Sustainable Agricultural Systems	3
Approved elective		2
	Credits	14



## **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 all of the courses listed below 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**

### **ACG 2021 Introduction to Financial Accounting 4**

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

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](http://www.cals.ufl.edu/undergraduate)



**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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An Equal Opportunity Institution