

AGRICULTURAL SYSTEMS MANAGEMENT (ASM)
ASM 115: **Fundamentals of Agricultural Systems Management**

Class Information:

Credit – 3
Fall 2021
Class Room: ABEN 201
Time: 12:00 - 12:50 pm MWF

Instructor:

Matt Olhoft
ABEN 204
Phone: 701-231-7269
E-mail: matthew.olhoft@ndsu.edu

Office Hours: By appointment or drop in. Usually available Tuesdays and Thursdays 8-5.

Bulletin Description: Overview of agricultural system management; engines, machinery, electricity, structures, processing, and conservation. 3 lectures.

Course Description: Because the first year experience can be challenging for new students, ASM 115 will incorporate some basic success strategies. The first few weeks of the class will introduce students to the ASM faculty, department, and help new ASM students transition to college life by learning tools to be successful. ASM 115 is a general overview and introduction to Agricultural Systems Management (ASM): engines, machinery, structures, electricity, processing, and conservation.

TEXT: "Introduction to Agricultural Engineering Technology: A Problem-Solving Approach," by John B. Solie and Harry L. Field. Third Edition (revised). Springer Science + Business Media, LLC 233 Spring Street, New York, New York 10013.

COURSE OBJECTIVES:

1. To develop an introductory understanding of the many study areas in Agricultural Systems Management.
2. To develop good problem solving skills and to learn to look for alternative solutions to problems.
3. To solve basic, applied, and practical problems in Agricultural Systems Management.
4. To provide an introduction to the remainder of the higher level Agricultural Systems Management courses.
5. To help new ASM students learn how to survive college and be successful. By learning about university success tools and learning about the ASM department.

REQUIRED RESOURCES: Text book, non-spiral letter size paper for homework, pencil, eraser, basic calculator

BLACKBOARD: Blackboard will be used for announcements, class presentations, assignments, and temporary grades presentation

GRADING

<u>Items</u>		Total Points
Tests	(4 tests, 4@100 pt.)	400
Home work	(5 Problem sets, 2 reports, 10 points each)	70
Quizzes	(2 Quizzes, 15 points each)	30
		Total pts: 500

(There may be extra credits for students in addition to the formal grading. So the total grade points can be more than 600).

The cut off for letter grades: 100-90.00% = A; 89.99-80.00% = B; 79.99-70.00% = C;
69.99-60.00% = D; 59.99% or lower = F

(Students are encouraged to work problems sets together. Working together can be a good learning experience. But the solution and submission of home work problem sets should be individual.)

Exams and quizzes policies:

Students are expected to take the tests at the appointed time and date unless other arrangements are made with the instructor. The tests will be combinations of types of questions, which may include short answer, problems, multiple choice, and fill in the blank questions, depending on what works best for the material covered. Quizzes may be given throughout the semester and may be either announced or unannounced. There are no make-ups for quizzes or tests, except in medical, family emergencies, or interview cases. Missed tests, exams, and quizzes will receive zero points unless missed for an acceptable reason and with advance notification where possible. The final exam will be comprehensive. Marks will be deducted if steps are not shown in word problem(s) in the test(s).

MISSING HOMEWORK ASSIGNMENTS

Homework is an important learning tool and assessment for you. It helps to understand the concepts discussed in class and it helps to develop good problem solving skills, which will be important in later courses and in professional life. You are expected to complete all homework assignments and hand them in for grading on time. Homework will be collected at the beginning of class. **No late submissions of Homework are accepted for full credit.**

MISSING CLASSES

You are expected to attend all class periods but there is no roll-call. If a class is missed, contact the instructor or class mates for notes. The PowerPoint presentations will be posted in the blackboard.

If you are unable to attend the class, let the instructor know ahead of time by e-mail or other written formats.

IMPORTANT NOTIFICATION

Academic Honesty: All students taking any course in the College of Agriculture, Food Systems, and Natural Resources are under the Honor System (<http://www.ag.ndsu.edu/academics/honor-system-1>). The Honor System is a system that is governed by the students and operates on the premise that most students are honest and work best when their honesty, and the honesty of others, is not in question. It functions to prevent cheating as well as penalize those who are dishonest. It is the responsibility of the students to report any violations of the honor pledge to the instructor, honor commission or the Dean of the College of Agriculture, Food Systems, and Natural Resources.

The academic community is operated on the basis of honesty, integrity, and fair play. [NDSU Policy 335: Code of Academic Responsibility and Conduct](#) applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the [Office of Registration and Records](#). Informational resources about academic honesty for students and instructional staff members can be found at www.ndsu.edu/academichonesty.

Students with special requirements: Any students with disabilities or other special needs, who need special accommodations in this course are invited to share these concerns or requests with the instructor as soon as possible. The instructor may ask for verification and that, plus other assistance, can be requested from Disability Services in Wallman Wellness Center 170 (231-8463). <http://www.ndsu.edu/disabilityservices/>.

Veterans and military personnel: Veterans or military personnel with special circumstances or who are activated are encouraged to notify the instructor as early as possible.

Well-being Resources on Campus and in the Community

As a member of the NDSU community, resources are available for you should you need help in dealing with adverse reactions to things happening in the world today. A variety of resources are listed below:

For students on campus and remotely (telehealth):

Counseling Services: 701-231-7671

Disability Services: 701-231-8463

Student Health Service: 701-231-7331

In a crisis or emergency situation:

Call University Police: 701-231-8998

Call 911

Go to a Hospital Emergency Room

Go to Prairie St. Johns for a Needs Assessment: 701-476-721 (510 4th St. S.)

Call the FirstLink Help Line: 1-800-273- TALK (8255) or 2-1-1

Call Rape and Abuse Crisis Center: 701-293-7273

Syllabus Statements on Masking

Currently (or at the time of writing this syllabus or as of August 9, 2021), NDSU is strongly recommending that all people wear masks in indoor spaces when social distancing cannot be maintained. Further, faculty may require masks to be worn in their classes at their discretion. In case of any changes, you will be notified and this syllabus will be updated. Consistent with NDSU's recommendations, **in this class all participants, including those who are fully vaccinated, are required to wear a face covering.** If you fail to properly wear a face covering, you will not be admitted to the classroom. Given the changing conditions associated with the pandemic, this class' faculty member has reserved the right to modify the mask status of the class during the semester. The following will be used as needed: referral to Dean of Students Office or administrative removal from class.

- Students who cannot wear a face covering due to a medical condition or disability, or who are unable to remove a mask without assistance may seek an accommodation through the Disability Services (701-231-8463; <https://www.ndsu.edu/disabilityservices/>).
- In accordance with NDSU Policy 601, failure to comply with instructions, including the mask requirement, may be handled according to the Code of Student Conduct resolution process and may result in disciplinary sanctions.

See https://www.ndsu.edu/police_safety/covid_19_preparedness_and_response/ for current guidelines. For additional language that can be used to compose your syllabus statement see: https://www.ndsu.edu/fileadmin/provost/Forms/Faculty/Syllabus_Checklist_for_COVID.pdf

Important Dates

Fall 2021

Variable Length Session Drop/Add Deadlines

Date	Day	Description
Aug 23	Mon	Classes begin at 4:00 p.m.
Aug 24	Tue	First full day of classes
Aug 31	Tue	Last day for Campus Connection Wait Lists to run
Sep 1	Wed	Last day to Add classes via Campus Connection* Permit needed after this date.
Sep 1	Wed	Last day for no-record Drop of classes @ 100% refund* <i>(full semester classes only)</i>
Sep 1	Wed	Last day to Withdraw to Zero Credits @ 100% refund* <i>(full semester classes only)</i>
Sep 1	Wed	Attempted credits calculated for financial aid SAP (11:59 p.m.)**
Sep 1	Wed	Eligible Pell/TEACH/ND Grants/Scholarships based on enrollment at 11:59 p.m.
Sep 6	Mon	HOLIDAY — Labor Day <i>(no classes, offices closed)</i>
Sep 7	Tue	Financial aid applied to NDSU account balances

Sep 8	Wed	Payments due for NDSU account balances
Sep 13	Mon	Last day to submit requests to Audit, Pass/Fail
Sep 20	Mon	Last Day to Add Full Semester Classes. Permit & Appeal needed after this date.
Oct 1	Fri	Last day to Withdraw to Zero Credits @ 75% refund* <i>(full semester classes only)</i> .
Oct First	Week	Spring/Summer registration schedule available
Oct Second	Week	Spring/Summer registration appointment times available
Oct 15	Fri	Late fees applied to unpaid account balances (11:59 p.m.)
Oct 15	Fri	Undergraduate/Professional Fall Graduation Applications due
Oct 15	Fri	Graduate student Intent to Graduate survey
Oct 15	Fri	Grades of 'Incomplete' convert to 'F'
Oct 18	Mon	2nd half (8-week session) of Fall semester begins
Oct 28	Thu	Spring/Summer registration begins online based on total credits completed
Oct 31	Sun	Last day to Withdraw to Zero Credits @ 50% refund* <i>(full semester classes only)</i> . No refunds issued for withdraw to zero credits after this date.
Nov 11	Thu	HOLIDAY — Veterans Day <i>(no classes, offices closed)</i>
Nov 12	Fri	Last day to Drop classes with 'W' record*
Nov 12	Fri	Last day to Withdraw to Zero Credits for Fall
Nov 15	Mon	Late fees applied to unpaid account balances (11:59 p.m.)
Nov 19	Fri	Graduate student Initial Disquisition submission for December graduation
Nov 19	Fri	Fall Commencement Participation deadline
Nov 22	Mon	Open registration for spring
Nov 24-26	Wed-Fri	HOLIDAY — Thanksgiving <i>(no classes; offices closed Thursday, offices open Wednesday& Friday)</i>
Dec 6-10	Mon-Fri	Dead Week
Dec 7	Tue	Grade entry begins
Dec 10	Fri	Last day of Fall classes
Dec 13-17	Mon-Fri	Final Examinations
Dec 15	Wed	Late fees applied to unpaid account balances (11:59 p.m.)
Dec 17	Fri	Graduate student Final Disquisition copy due for December graduation
Dec 17	Fri	Application for Graduate Degree forms for students not submitting a master's paper, thesis or dissertation.
Dec 17	Fri	Commencement ceremony (2:00 p.m. in Sanford Health Athletic Complex)
Dec 21	Tue	Grades due (12:00 p.m.)
Dec 21	Tue	Fall grade access begins online (late evening)
Dec 24	Fri	HOLIDAY — Christmas Day Observed <i>(offices closed)</i>

These are tentative dates for tests and material covered, the actual dates and material may vary. **That is why attendance is important.** Any change in schedule will be notified ahead of time.

THE DATE FOR FINAL EXAM IS THURSDAY, 16TH DECEMBER, 2021; 3:30 – 5:30 PM

GENERAL CLASS SCHEDULE (subject to change)

Period	Date	Topic	Unit
1	Aug. 25	Introduction to ASM Department	
2-3	27-30	High School to College Transition/Time Management	
4-5	Sept. 1-3	(discussion and examples)	
6	8	Problem Solving	1
7	10	Numbers	2
8	13	Terminology units	3
9	15	Simple Machines	4
10	17	Simple Machines	4
11	20	Internal Combustion Engines	5
12	22	Internal Combustion Engines	5
13	24	Power Trains	6
14	27	Power Trains	6
15	29	Tractors & Power Units	7
16	Oct. 1	Tractors & Power Units	7
17	4	EXAM I	
18	6	Machinery Calibration	8
19	8	Machinery Calibration	8
20	11	Equipment Efficiency & Capacity	9
21	13	Equipment Efficiency & Capacity	9
22	15	Economics of Ag Machinery	10
23	18	Economics of Ag Machinery	10
24	20	Sound and Noise	11
25	22	Sound and Noise	11
26	25	EXAM II	
27	27	Measuring Distance	12
28	29	Land Description	14
29	Nov. 1	Surveying and Leveling	15
30	3	Surveying and Leveling	15
31	5	Water Runoff	17
32	8	Water Runoff	17
33	10	Erosion and Erosion Control	18

34	12	Erosion and Erosion Control	18
35	15	Irrigation	19
36	17	Irrigation	19
37	19	EXAM III	
38	22	Principles of Electricity	25
39	24	Principles of Electricity	25
40	26	Series and Parallel Circuits	26
41	29	Series and Parallel Circuits	26
42	Dec. 1	Sizing Conductors	27
43	3	Electric Motors	28
44	6	Review	
45	8		
46	10		
47	16	Final Test (including units 25-28)	