

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

Class Information:

Credit – 3

Fall 2023

Class Room: Sugihara Bldg. Rm 118

Time: 12:00 - 12:50 pm MWF

Instructor:

Matt Olhoft

Ladd Hall 104H

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/academic honesty.

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

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Aug 21	Mon	Classes begin at 4:00 p.m.
Aug 22	Tue	First full day of classes
Aug 28	Mon	Last day to be added to Campus Connection Wait Lists
Aug 30	Wed	Last day to Add classes via Campus Connection * Permit needed after this date.
Aug 30	Wed	Last day for no-record Drop of classes @ 100% refund* (<i>full semester classes only</i>)
Aug 30	Wed	Last day to Withdraw to Zero Credits @ 100% refund* (<i>full semester classes only</i>)
Aug 30	Wed	Attempted credits calculated for financial aid SAP (11:59 p.m.)
Aug 30	Wed	Eligible Pell/TEACH/ND Grants/Scholarships based on enrollment at 11:59 p.m.
Sep 4	Mon	HOLIDAY — Labor Day (<i>no classes, offices closed</i>)
Sep 5	Tue	Financial aid applied to NDSU account balances
Sep 6	Wed	Payments due for NDSU account balances
Sep 8	Fri	Last day to submit ND Resident Student Status Application for Fall 2023
Sep 11	Mon	Last day to submit requests to Audit, Pass/Fail
Sep 18	Mon	Enrollment Census
Sep 29	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 13	Fri	Grades of 'Incomplete' convert to 'F'
Oct 15	Sun	Late fees applied to unpaid account balances (11:59 p.m.)
Oct 16	Mon	Undergraduate/Professional Fall Graduation Applications due
Oct 16	Mon	Graduate student Intent to Graduate survey
Oct 16	Mon	2nd half (8-week session) of Fall semester begins
Oct 26	Thu	Spring/Summer registration begins online based on total credits completed
Oct 29	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 9	Thu	Last day to Drop classes with 'W' record
Nov 9	Thu	Last day to Withdraw to Zero Credits for Fall
Nov 10	Fri	HOLIDAY — Veterans Day Observed (<i>no classes, offices closed</i>)
Nov 15	Wed	Late fees applied to unpaid account balances (11:59 p.m.)
Nov 15	Wed	Graduate student Oral Defense Deadline
Nov 17	Fri	Fall Commencement Participation deadline
Nov 17	Fri	Graduate student Post-Defense Submission for Format Review
Nov 20	Mon	Registration Appointment times no longer needed for spring

Nov 22-24	Wed-Fri	HOLIDAY — Thanksgiving (<i>no classes; offices closed Thursday, offices open Wednesday & Friday</i>)
Dec 4-8	Mon-Fri	<u>Dead Week</u>
Dec 5	Tue	Grade entry begins
Dec 8	Fri	Last day of Fall classes
Dec 11-15	Mon-Fri	<u>Final Examinations</u>
Dec 15	Fri	Late fees applied to unpaid account balances (11:59 p.m.)
Dec 15	Fri	Graduate student <u>Final Degree Clearance Deadline</u>
Dec 15	Fri	<u>Graduation Application</u> and <u>fee</u> (Certificate and Plan C Students).
Dec 15	Fri	<u>Commencement</u> ceremony (2:00 p.m. and 5:00 p.m. in Sanford Health Athletic Complex)

tant Dates

GENERAL CLASS SCHEDULE (subject to change)

Period	Date	Topic	Unit
1	Aug. 23	Introduction to ASM Department	
2-3	25-30	High School to College Transition/Time Management	
4-5	Sept. 01	(discussion and examples)	
6	04	Problem Solving	1
7	06	Numbers	2
8	08	Terminology units	3
9	11	Simple Machines	4
10	13	Simple Machines	4
11	15	Internal Combustion Engines	5

12	18	Internal Combustion Engines	5
13	20	Power Trains	6
14	22	Power Trains	6
15	25	Tractors & Power Units	7
16	27	Tractors & Power Units	7
17	29	EXAM I	
18	Oct. 02	Machinery Calibration	8
19	04	Machinery Calibration	8
20	06	Equipment Efficiency & Capacity	9
21	09	Equipment Efficiency & Capacity	9
22	11	Economics of Ag Machinery	10
23	13	Economics of Ag Machinery	10
24	16	Sound and Noise	11
25	18	Sound and Noise	11
26	20	EXAM II	
27	23	Measuring Distance	12
28	25	Land Description	14
29	27	Surveying and Leveling	15
30	30	Surveying and Leveling	15
31	Nov. 01	Water Runoff	17
32	03	Water Runoff	17
33	06	Erosion and Erosion Control	18
34	08	Erosion and Erosion Control	18
35	10	Irrigation	19
36	13	Irrigation	19
37	15	EXAM III	
38	17	Principles of Electricity	25
39	20	Principles of Electricity	25
40	22	Series and Parallel Circuits	26
41	24	Series and Parallel Circuits	26
42	27	Sizing Conductors	27
43	28	Electric Motors	28
44	Dec. 01	Review	
45	04		
46	06		
47	08		

48	15	Final Test (including units 25-28) Dec. 12 10:30 am	
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