

Digital Agriculture in Today's Classroom



Day 1 – Tuesday, June 25, 2024

		LOCATION
8:30 a.m. - 9:30 a.m.	<p>Welcome <i>Dr. Carrie Hammer, Professor/Interim Associate Dean of CAFSNR</i> <i>Dr. Alan Kallmeyer, Interim Dean, College of Engineering</i> <i>Dr. Leon Schumacher, NDSU Department Chair, Ag and Biosystems Engineering</i></p> <p>Intro to Precision Ag – The beginnings: 1991 - Rob Proulx and Mike Ostlie</p>	Ladd 114
9:30 a.m. - 10:30 a.m.	<p>GIS basics and its application to precision agriculture – <i>Dr. Dave Kramar & James Kim, International Water Institute & USDA ARS – Fargo and potentially Max Cossette – 701x</i></p>	Ladd 114
10:30 am – 10:40 am	<p>Snack Break & Demo of 6-row planter</p>	Ladd 114
10:40 a.m. - 11:30 a.m.	<p>Utilizing Today's Digital Ag Tools in a Research Setting – Crop and Livestock – <i>Dr. Rex Sun</i></p>	Ladd 114
11:30 a.m. - 12:30 p.m.	<p>Working Lunch - Lesson Plan Project – <i>Matt Olhoft</i></p>	Nueta in Student Union
12:30 p.m. - 1:50 p.m.	<p>Digital Agriculture Data from a Farmer's Perspective - <i>Sarah Lovas, Farmer/Agronomist – GK Technology</i> https://gktechinc.com/contact-us/. - <i>Carmel Miller, Farmer/Associate Professor of Agriculture, Technology & Natural Resources - Bismarck State College</i></p>	Ladd 114

Day 1 – Tuesday, June 25, 2024 (continued)

	Tour RDO Product Showcase: What is the Latest Software/Hardware in Digital Ag Today? • John Deere - RDO - <i>Tony Kramer, RDO</i> • My Operations Center – <i>Tony Kramer, RDO</i> • 2960 34th St S, Moorhead, MN	LOCATION RDO
4:00 p.m. – 5:00 p.m.	Profit Strategies for Precision Agriculture - <i>Dr. Erik Hanson, Agribusiness and Applied Economics - Extension</i>	Ladd 114
5:30 p.m. – 7:30 p.m.	Supper as a group	Bison Turf

Day 2 – Wednesday, June 26, 2024

7:45 a.m.	Welcome Back & Review <i>Dr. Leon Schumacher</i>	LOCATION Ladd 114
8 a.m. - 8:30 a.m.	• Travel to 3314 70th St S, Glyndon, MN for Titan Machinery Tour	
8:30 a.m. - 10:30 a.m.	Tour Titan Machinery Product Showcase: What is the Latest Software/Hardware in Digital Ag Today? • Case IH – <i>Sam Christianson and Brett Swenhaugen, Titan Machinery</i> • 3314 70th St S, Glyndon, MN	Titan Machinery, Moorhead Store
10:30 a.m.	Travel to Grand Farm	
11:00 a.m. - 12 p.m.	Working Lunch at Grand Farm – Lesson Plan Project Use of the “Box”, Adam Marx, Brooke Theil, Matt Olhoft, Ruchi Bhardwaj - Grand Farm	Grand Farm
12:00 p.m. - 3:30 p.m. Participants will be split up into 3 Groups - 30 minutes at each station	Drone flying/image data collection/data review at Grand Farm Introduction by Grand Farm staff 1. <i>Matt Olhoft</i> – The box! 2. <i>Rob Proulx</i> - Drone regulations and setup (Include aspects of Part 107 requirements. Demonstration of setup of several drone types, practice taking off and landing). 3. <i>Paulo Flores</i> - Monitoring crops using drones (Demonstrate drone mapping mission setup, talk about sensors and their purpose. Demonstrate a flight to collect data, show results from previous flight, and discuss how the information can be used. 4. <i>Rex Sun</i> - Drone use in weed management. (Show results of weed mapping. Explain what a prescription map is and how it helps, and demonstrate sprayer drone flight). Robotics in the field - weed identification. Big Weedbot.	
3:30 p.m.	Wrap up	