



The Green Jack

Dakota College at Bottineau Horticulture AND Agriculture Department



105 Simrall Blvd.
Bottineau, ND 58318

CHECK OUT WHAT'S NEW THIS SPRING, 2023!

The Horticulture and Agriculture Programs Spring 2023

Ag Management and Technology

The Agriculture Department is geared up and ready for Spring Semester 2023. The program has continued to grow with increasing numbers of classes offered and increasing number of students enrolled in our program. Many of our classes are offered in a hybrid form which means students have the opportunity to take some classes online and in person. This option is ideal for our students who are active in sports or other extracurricular activities on campus.

Our Ag Management and Technology program places an emphasis on food systems, environmental issues, and development of life skills. Dakota College at Bottineau still utilizes IVN technology to share courses with Williston State College and Lake Region State College.

We had a handful of our current students make the Dean's List for Fall 2022 Semester! A student's education in agriculture focuses on, but is not limited to, study in horticulture, forestry, conservation, natural resources, agricultural products and processing, production of food and fiber, sales and service, economics, marketing, and leadership development. The Introduction to Weed Science class was brought back this semester for students to take as it was previously on hold. Students are able to learn agricultural skills and knowledge, occupation training and retraining as well as professional growth and development.

Most of the students that are currently enrolled in the Ag Management and Technology Program are working towards

their Associate of Applied Science Degree and are considering transferring to 4-year colleges. While many classes and schedules are staying the same, we are planning on attending surrounding Ag Shows throughout the state including the KMOT Ag Expo at the end of January and the Williston Weed Show at the beginning of February. We also offer information sessions to high schools in response to more interest across the state than there have been in previous years.

Aside from our student's education and internship opportunities, recruitment is one of our top priorities. We pride ourselves in better preparing our students for the outside world and real-life experiences they will have.

Horticulture

The Horticulture Department at Dakota College at Bottineau (DCB) is a team of faculty, staff and students dedicated to learning about and expanding the horticulture industry in North Dakota. The horticulture industry has many career opportunities for anyone who enjoys working with plants!

It is a great time to enter the horticulture industry where trade information shows strong hiring numbers, quality working conditions and healthy wages. It is not difficult to find employment as we receive many more business employment inquiries each year than we have students graduating from our horticulture programs.

FOR MORE INFORMATION ABOUT DCB HORTICULTURE AND AGRICULTURE PROGRAMS CONTACT:

Agriculture Instructor/Advisor

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sUAS Instructor/Advisor

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DCB is proud to have one of the strongest horticulture programs in the region. There are several reasons for the strength of our horticulture program. Our students are able to learn through several different learning platforms incorporated in the program, such as our IVN and Blackboard technology. Classes taught in the classroom use a hybrid platform where students can participate virtually in the class without needing to be on campus. Each class is recorded and made available to students who cannot attend during the scheduled class time. Another great learning platform is the hands-on experience students receive. On campus students have the opportunity to experience real life situations during the practicums and internships. DCB works with employers and students who are not on campus so that the students are provided with the same learning experiences anywhere they may live and work.

Students also have the opportunity to experience a once in a lifetime opportunity to learn and work at the International Peace Garden. The Peace Garden is nearly 2400 acres of indoor and outdoor gardens, displays, hiking trails, sunken gardens, and a conservatory that is home to the

world class Don Vitko Collection of cacti and succulents!

Our students have the opportunity to choose a concentration for their horticulture degree which includes Greenhouse Technology, Hydroponics and Aquaponics, Floral Design, Specialty Crop Production and Hemp Production.

Dakota College at Bottineau is a small college with caring faculty who feel it is important to know each student's name and just a little bit about their background. This time of the year, students enjoy all that the Turtle Mountains have to offer. Join us today and to learn about your new career in a truly life-changing experience in Horticulture!



sUAS (Small Unmanned Aircraft Systems)

Due to my new position with Farm Management Education, I've stepped back from teaching face-to-face some. As a result, we don't have courses offered in UAS this semester and the focus has been on my course development for the USDA Grant.

Our USDA Grant (Secondary Education, Two-Year Postsecondary Education, and Agriculture in the K-12 Classroom Challenge Grant) through the NIFA, continues to move forward. I have continued to work on course development as we prepare to offer the UAS 101, UAS 107, and UAS 210 courses dual credit in an online format in the Fall of 2023 to our first pilot school! Our next step will be to purchase the equipment

we need for our pilot school. Over the summer, an instructor at the high school will be trained to fly drones and study to take the UAS remote pilot 107 exam to be a certified remote pilot! We are waiting to hear about additional grant funding we have applied for to aid in expanding our program. This would increase the course offerings and allow us to buy additional equipment for drone use in agriculture and natural resources. With the addition of this funding, an additional instructor could be hired or trained to teach courses in our UAS program. If you know someone that would be interested in teaching, please have them reach out to me or stay tuned to employment opportunities on the Dakota College at Bottineau website!

Farm Management Education Program

My first year working with farmers and ranchers on their recordkeeping is in full swing! It's been keeping me very busy. January, February, and March tend to be the time of year producers want to go through their records, whether it be for management purposes or tax purposes.

I've been spending time getting to know the producers enrolled in the program and learning about their farms. I'll also be out and about at various Ag Shows this Spring when I can be. Our Farm Management Education program will have a booth at the KMOT Ag Expo at the end of January and I hope to be at the Renville Bottineau Ag Improvement Association Seed Show in February.

All these events are sure to keep me busy, but I've got more planned. Based on some guidance from my advisory committee, I'm hoping to put on a brief presentation on preliminary numbers from the 2022 growing season and trends from the last few years. Ideally, I will host this in April on Dakota College at Bottineau Campus. It will be geared towards farmers and ranchers in the North Central Region of the state. More information will be forthcoming.

-Linda Burbidge, PhD

Greenhouse Updates

As you may remember, a new Greenhouse Manager was hired in August and boy has she been busy!

Aside from dealing with the pesky bugs, she has given the DCB Greenhouse a makeover! Summer plants have been started early in hopes of propagating them for other uses. The Banana Tree is also producing! It was uncertain if any bananas would be harvested as two bunches were harvested last year, so this is very exciting news! A banana tree (from the genus *Musa*) is an herbaceous perennial with large leaves that sprout from a corm at the base of the plant beneath the soil. A banana tree is not a true tree; the "trunk" is a cluster of new leaves growing from inside one another, forming a pseudostem which is a false stem made of the rolled bases of leaves.

The spring sale is sneaking up fast as well as Valentine's Day and Easter! We have some Amaryllis blooming specifically for these purposes. We have information in the Greenhouse about Amaryllis care.

Purple New England Aster plants have been purchased for planting on the Dakota College Campus. These were chosen because they are still blooming in late November and can bring some color to campus when there is a blanket of white! We are also going to incorporate a small pumpkin patch on campus so students, staff and community members can come purchase for their needs!

FOR MORE INFORMATION ABOUT
VISITING OR VOLUNTEERING AT THE
DCB GREENHOUSE AND FARM

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General DCB Updates

It has been a season of change for Dakota College at Bottineau, beginning with the retirement of long-time Campus Dean and Chief Executive Officer Dr. Jerry Migler. His retirement allowed me to come home again, and I am deeply humbled to now be serving as the fifteenth leader of our institution. The departure of Associate Dean for Academic and Student Affairs Larry Brooks, who now serves as Vice President for Academic Affairs with Valley City State University, gave us an opportunity to review our organizational structure. Heidi Kippenhan has taken on additional responsibilities in her role as Registrar to become the Associate Dean for Student Services and Kayla O'Toole has accepted a position as Associate Dean for Academic Affairs while also remaining responsible for dual credit and distant learning. As a college, we have already taken great strides in our relationship with our accreditor, the Higher Learning Commission. As we move ahead, we are committed to working with our faculty to assure that our academic programs remain both high-quality and relevant, and that they continue to serve us well in the coming years.

When I arrived on campus, I inherited two very exciting construction projects. The first of these is the Minot dental project, which is taking place at 120 Burdick Expressway East. Many community partners are assisting with this renovation, and we are thrilled to be bringing two new programs – Dental Assisting and Dental Hygiene – to the Minot area soon. The second project is our new Center for Rural Healthcare Education, more affectionately known as the Old Main project. The transformation of Old Main into a state-of-the-art facility to support our Nursing Program is monumental for us. It will be fun to watch both of these projects move forward over the next few years.

Dakota College at Bottineau is a unique institution and, as you know, we draw our strength from collaboration. It has been a joy learning our history, listening to our current opportunities and challenges, and beginning to plan together for our future. My heart is full of gratitude for the opportunity to lead Dakota College at Bottineau. With Minot State University by our side and with the strength of the North Dakota University System behind us, we are ready to seek our destiny. As we do, we owe a special thanks to those

who have already worked so hard in the past to make Dakota College at Bottineau what it is today.

-- Dr. Carmen Simone, Dean



Meet Our Staff

Meet our sUAS Instructor, Director of Assessment, and Farm Business Management Instructor, Linda! She has a bachelor's degree in Agricultural Economics, a master's degree in Agribusiness and Applied Economics and a PhD in Agricultural Economics along with a certification in Base SAS Programming and a Remote Pilot Certificate. Linda teaches a few Agriculture and sUAS classes but focuses mainly on assisting Farmers. She is a program advisor for the AG and UAS students, recruits' students throughout the state and helps improve course quality and co-curricular activities at DCB. Linda and her husband have 3 children together and have 26 head of Bison. In her free time, she enjoys fishing, camping, and working on the farm along with gardening and baking!



Meet our administrative assistant, Breanna! She started her position in June 2021 and helps with many duties throughout the department such as scheduling meetings, creating various spreadsheets and documents, assisting instructors with their course materials

and grant reporting. Breanna graduated from DCB in 2019 with her AAS in Caregiver Services and graduated from the University of Mary in June 2021 with her Bachelor of Business Management Degree. She also has various training certificates in Microsoft Excel, Title IX, and Grant Writing. Much of her background is in medicine working as a CNA, medical insurance biller, and provider credentialing. In her free time, she enjoys reading, attending sporting events and traveling. Breanna shares a daughter, Phoenix, with Assistant Women's Hockey Coach, Ashley Blue.



Meet Lynn Nero, our Greenhouse Manager. Lynn was hired over the summer and started her new position on August 5th. Lynn assists and provides instruction to students, supervises, and manages the high tunnels, campus gardens, wash and pack facility, greenhouse, city planters and other departmental events. A majority of Lynn's background is in the medical field however she has extensive management experience. She has also had many years of experience in gardening and flower upkeep! Lynn is originally from Canada and is married to our Physical Plant Director, Chris Nero. In her free time, she loves kayaking, fishing and being outside. She is also a seamstress and has been sewing since she was 5 years old!



Meet our new Agriculture Instructor, Raquel! She is teaching courses in Agriculture, Horticulture and assisting in various lab courses. She has a bachelor's degree in Agricultural Education, an Agricultural Extension and General

Agriculture Endorsement in Science and a Minor in Biology and Animal Science! Raquel has been a teacher for many years and is very excited to finally reach her goal of teaching as the post-secondary level. In her free time, Raquel enjoys spending time with her family, gardening, going to concerts and spending time at the lake. She is also an alumnus of DCB!



Peter Keane is the residential landscape design instructor. His background includes 29 years of experience in horticulture where he operated his own nursery and landscaping company for 12 years. He was a landscaping instructor in Ireland, a Horticulture Technician at Busch Gardens in Tampa, Florida, and a landscaping supervisor at Fort Bragg in North Carolina! Currently, Peter is working towards his MHort Degree at the Royal Horticultural Society. In his free time, Peter enjoys trail and mountain running as well as landscape photography. He is also an active-duty military spouse for the Air Force! There is a statue of Peter representing the Irish Navy in the military remembrance garden in Dublin!



Student Testimonials

Dakota College at Bottineau prides itself in student success and necessary preparation for the outside world.

Harlee Cook is a first-year horticulture student at Dakota College at Bottineau anticipated to graduate in Spring 2024. Originally from Watford City, Harlee

decided to expand her education by coming to DCB. She chose DCB over other schools because she "liked how it was a smaller college compared to my other choices since I wanted to be able to talk to my teachers and ask them questions face-to-face if I ever needed help". So far, her favorite class is Plant Identification because she "loves to learn about plants like where they originated from and other things that are specific to plants but relate to others at the same time".

Dustin Gilseth, from Langdon, ND, is a second-year horticulture student at DCB. He will graduate with his AAS in Horticulture with a concentration in Greenhouse Technology in May. Dustin has "always had an interest in being outside so when I learned there was a Horticulture Program at DCB, it really expands my knowledge for being outdoors and doing what I love". DCB is small in size which is why many students choose to come here to begin their college adventures. His instructors have helped promote success by giving advice and encouraging him to never give up. "In high school, I did not know what I wanted to do or what direction I wanted to go. DCB really opened my eyes, and I realized that there is a bigger variety of things that I can do in Horticulture than just any degree".

Jess McInnes, from Canada, is also a second-year horticulture student who will graduate in May. Her focus is mainly on garden to table. "I want to be able to grow food and sell to community members. I also want to have the ability to give food to those who are less fortunate. While some may not realize the impact that gardeners and producers have on a community". Jess has also been working diligently on the new dining center landscape project, which will be completed hopefully in the summer of 2023.

Community Education Classes

Dakota College at Bottineau offers many online community education classes at affordable prices! Among those classes are two courses geared toward producers and members of the various farmers markets throughout the state.

The Good Agricultural Practices (GAP) community education course was developed due to the growing interest in locally produced fruit, vegetables,

and other food products. A lot of the time during the summer and early fall months, you will see producers selling their products such as corn, pumpkins, and other vegetables. This has become a common feature in the state of North Dakota which encourages economic development by promoting locally grown products. This course takes you through a food safety plan and post-harvest activities. Some of the topics include traceability, health and hygiene, agricultural water, manure and soil additions, animals in the growing area, sprouts, allergens, and equipment. For more information please visit:

<https://www.dakotacollege.edu/explore-dcb/community-education> GAP Fact Sheet.

Farmers Markets are also a staple in North Dakota as we are an agriculturally dominant state. The Farmers Market Manager Training Course is available for anyone interested in becoming a manager for a local Farmers Market. These Market Managers are responsible for all aspects of the Farmers Market, and they are also the main contact for customers, vendors, volunteers, social media and more! This course will assist Farmers Market Managers with operating a farmers' market in their community and will provide ideas and ways to increase the customer and vendor base at the local farmers' market. For more information please visit:

<https://www.dakotacollege.edu/explore-dcb/community-education> Farmers Market Manager Fact Sheet.

Horticulture Students Tackle Landscaping Project Around the New Dining Center on DCB Campus

With a new building on campus, comes landscaping ideas as well. In the summer of 2021, Dakota College of Bottineau started a new project on campus of building a new dining center for their students. This would open up a new area for students to eat, study and reminisce with each other. The design of the project also gave the dining center a cement patio area for students as well as a lawn area that wasn't available previously. The horticulture department took this task and made this a project for the practicum students to tackle. According to the blueprints, the students had roughly 236 square feet to work with. Three students put their minds together and created a beautiful plan for this area. Eric Hildebrand, Dustin Gilseth, and Jessica McInnes started working on this project at the beginning of April 2022 and had presented their project ideas to Dr. Migler,

campus dean, Christopher Nero, director of physical plant services and Keith Knudson, Horticulture Department Chair on May 2nd. "This will be one of the most visible landscaping projects on campus, as it will be seen by everyone who is using the dining center" states Dr. Migler, retired dean of Dakota College at Bottineau.

The students decided to make their designs a continuation of the pollinator garden that is already established on campus, which also happens to be in that area as well. This will also create a "no spray no mow" area. Because this is a continuation of the pollinator garden, the plants are deer and rabbit resistant and are specific for bees, birds, and other pollinators. According to Jessica McInnes, the students wanted to "have a cohesive theme by incorporating plants that already exist at other locations on campus {and} with the certified pollinator garden being the closest existing flowerbed, it was a no-brainer". This will also require little maintenance and "serve as a barrier between the areas of campus that are sprayed with chemicals and heavily mown" states Jess. Dr. Migler, Chris, and Keith were all delighted that the students took it upon themselves to incorporate their project with the existing pollinator garden on campus.

There are going to be a plethora of plants associated with this project. Each student was asked what plant(s) they were most excited for. "I'm a huge fan of the prairie grasses we chose to implement in the design. Karl Foerster and Prairie Dropseed to be specific. The height and movement of these grasses seem to bring the design alive and give it that final touch we all seem to seek," states Dustin. Eric is most excited about the Arctic Fire Dogwoods. According to him, "it is a perennial shrub that has four season appeal". The Micro Clover Lawn is what Jess is most excited about. This lawn will bring important nutrients back to the soil and it will have an inviting green space for individuals to enjoy.

Some might ask how this project will benefit the school and future students. According to Chris Nero, Physical Plant Director, "a beautiful, landscaped area improves the quality of life for our students and it's great for future students trying to decide where they may go to school". Not only will it be a visually appealing area for students, it is also an area to showcase the horticulture department on campus. This project goes

to show that the classes the students are required to take help tremendously with real-world tasks that they may face in their future careers. "All of our classes are meant to prepare students for real life situations, and when the landscape project was brought up, I immediately wanted to incorporate it into their studies" states Keith Knudson, Horticulture Department Chair. All three students stated that their professors and classes did a phenomenal job in preparing them for this project.

This is just the start of landscaping projects for the Horticulture Department. According to Dr. Migler, there are going to be similar projects in the future. Once renovations have been completed "there will be a need to develop a landscape plan for Old Main and also the new CTE Center in Minot," states Dr. Migler. These projects are a great learning exercise and give the students "something to be proud of" according to Chris. While Jess, Dustin and Eric will not be here when the renovations are completed for Old Main and the new CTE Center, they certainly have something to be proud of for many years to come. "For the future, I have learned to take a step back and look at whatever I'm working on through a bigger lens. Everybody sees certain things differently, so when working on a project like this, it can be hard to focus on the little details that you may not notice at first glance" states Dustin.

A placard is being made with the student's name and picture to be put up in that area to recognize them and all of their time and effort they have put in to make this design come to life.



Dining Center Landscaping Plans presented by:



Jess McInnes
Horticulture-AAS
Minnedosa MB

Dustin Gilseth
Horticulture-AAS
Langdon, ND

Eric Hildebrand
Horticulture-AAS
Brandon MB

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Dakota College at Bottineau
105 Simrall Blvd.
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Dakota College at Bottineau offers certificates and degrees as diverse as information technology, health care, and marketing.

With small classes and a family atmosphere, you won't have to struggle for face time with your professors. Our faculty are dedicated to teaching and are accomplished in their fields, but above all they are available and approachable.

If you're looking for an affordable, high-quality education in a down-to-earth environment, there's a niche for you at Dakota College at Bottineau. Come on in and find it.

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