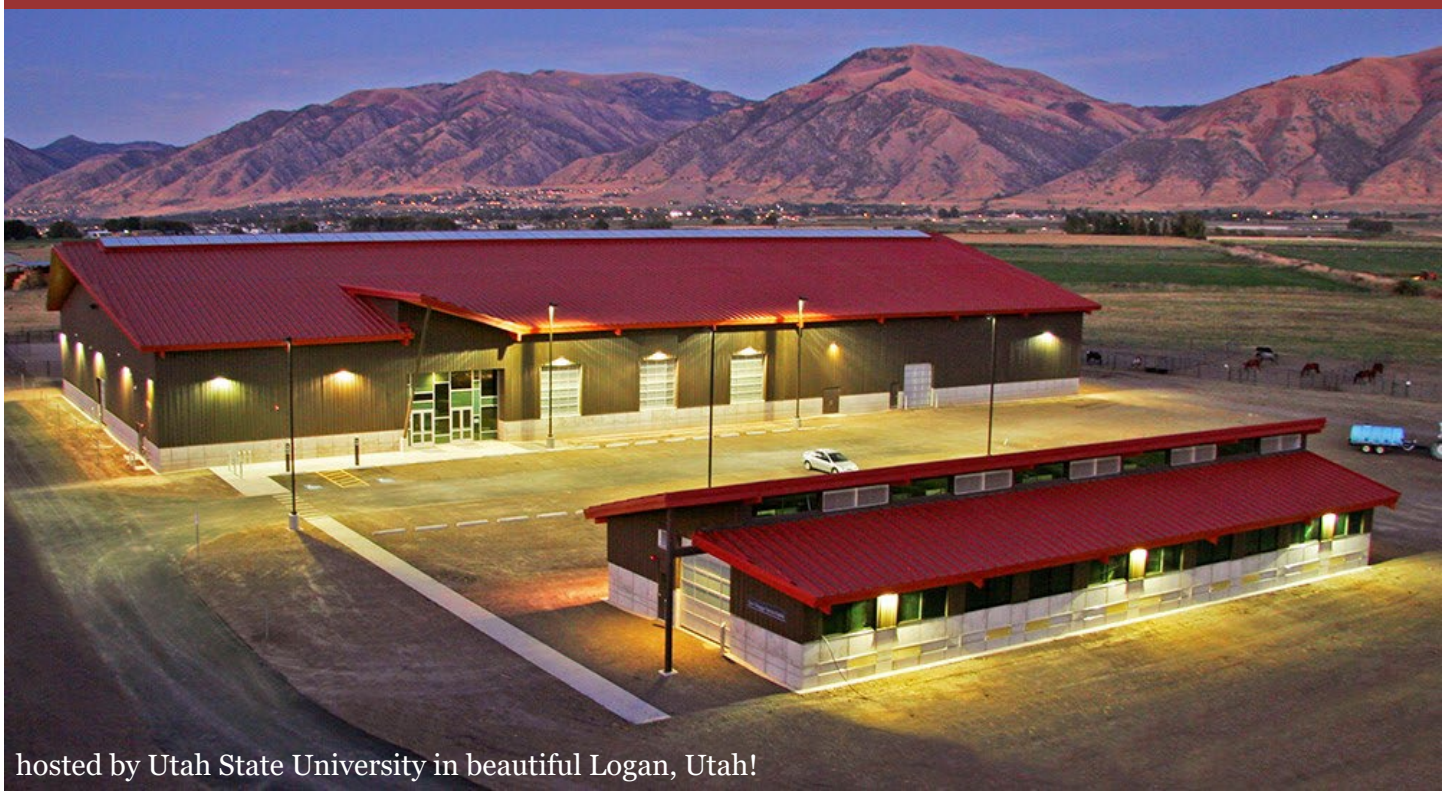
13th Annual NAEAA Conference

May 31st -June 2nd, 2022



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* indicates presenting author

Welcome!

Dear Colleagues,

I am delighted to welcome to you to the 13th Annual Conference of the National Association of Equine Affiliated Academics (NAEAA). NAEAA Annual Conferences are designed to advance the equine academic discipline through increased cooperation and communication, and this year's program is sure to spark collaborative discussion around topics important to undergraduate equine programs. It's been three years since our last in-person gathering, and I know many of you are looking forward to the inspiration, information sharing, networking, and sense of community that are hallmarks of this annual event. Whether this is your first NAEAA Annual Conference, or you're a long-time attendee, I'm glad you have chosen to join us, and am certain that the next few days will provide you with new contacts, insight, and ideas that can benefit your own equine program.

Speaking of benefits, I'm happy to say that over the past year, the NAEAA Board of Directors has worked hard to introduce new efforts to better serve the membership, such as our expanded awards program and an illuminative NAEAA Book Club. Additional plans are in the works for timely, interactive webinars on a variety of topics relevant to undergraduate equine programs, and also new ways to engage our undergraduate and graduate student members. We are always looking for additional ways our organization can help its members, so if you have a great idea you'd like to see pursued, please reach out to me or one of the other NAEAA Board Members in attendance at the conference. We'd love to hear from you!

I would like to thank the hard-working members of the NAEAA Annual Conference Committee for their year-long efforts in scheduling and planning this year's conference. We are fortunate to be able to visit beautiful Logan, Utah and the campus of Utah State University this year, and I want to personally thank our in-state hosts, Dr. Karl Hoopes of Utah State University, and Mr. Lee Wood of Southern Utah University, for overseeing the planning efforts. Additionally, we are especially grateful for our NAEAA Partners and Annual Conference Sponsors who make it possible for us to keep this event affordable for all who attend! Finally, I would like to thank the rest of the NAEAA Board of Directors, including our Executive Director Dr. Karin Bump, for their wonderful help not only in conference planning, but helping me navigate my first year as Board Chair. I know we are all excited to help NAEAA achieve its goals and serve our nation's equine academic programs!

Sincerely,

Rebecca K. Splan, PhD
Chair, NAEAA Board of Directors

Making this conference possible

Annual Conference Committee

- Karl Hoopes (Co-Chair)
- Lee Wood (Co-Chair)
- Amy Burk
- Aubrey Jaqueth
- Jacquelyn Bowser
- Kelly Riccitelli
- Trinette Jones
- Betsy Greene

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(year joined the board)

- **Chair:** Rebecca Splan (2019)
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- Jessica Suagee-Bedore (2021)
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About NAEAA

Founded in 2007, NAEAA is a non-profit professional organization representing individuals from public and private institutions and the equine industry that strive to educate undergraduates within an equine academic program.

Our core belief is that there is educational and societal value in the equine disciplines of study.

Our mission is to strengthen post-secondary equine academic programs, provide networking opportunities, and facilitate increased cooperation and information sharing among our members.

NAEAA association goals include:

- Provide a venue to share ideas and information concerning equine programs.
- Provide assistance to colleges and equine programs to develop, expand, and improve curricular offerings.
- Develop a comprehensive database of "best practices" – ranging from the optimum number of students in a riding class to ways to work with animal right activists on or near a campus.
- Provide assistance to faculty/staff in developing program quality standards for informal assessment or required formal assessment.
- Develop national and international internship and exchange opportunities for students in member institutions.
- Develop faculty exchange programs between member institutions.

More about NAEAA on our organization website: https://www.naeaa.com/

Past conferences

2021 Virtual
2019 Asheville, NC
2018 Stephenville, TX
2017 Minneapolis, MN
2016 Hackettstown, NJ
2015 St. Pete Beach, FL
2014 Louisville, KY
2013 Mescalero, NM & Newark, DE
2012 Bozeman, MT
2011 Murfreesboro, TN
2010 Cazenovia, NY
2009 Keystone, CO

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Karl Hoopes (Co-Chair)
Lee Wood (Co-Chair)
Amy Burk
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Jacquelyn Bowser
Kelly Riccitelli
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Betsy Greene

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Kelli Munns
Laurie Chapman-Bosco
Kathi Jogan

Student Involvement

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Kristen Wilson (Co-Chair)
Stephanie Jones
Casie Bass
Katheryn Cerny
Karen Wimbush

Awards

Shea Porr (Chair)
Crystal Smith
Michelle Kibler

2022 NAEAA Conference Schedule

Utah State University, Logan, UT

Tuesday, May 31, 2022 (DBH President's Hall)	
2:00 pm – 6:30 pm	**Registration Open**
3:00 pm - 5:00 pm	**NAEAA Board Meeting**
6:00 pm – 8:00 pm	**Welcome Reception** Welcome by NAEAA Board Chair, USU Local Committee
Wednesday, June 1, 2022 (Eccles Conference Center Rooms 205/207)	
7:30 am – 8:30 am	**Breakfast**
8:00 am – 10:00 am	**Registration Open**
8:30 am – 9:00 am	**Opening presentation** – Dr. Ken White, Dean of the College of Agriculture and Applied Science at USU
Session 1. Workshop: Teaching Controversial Topics, with Emphasis on Management of Feral Equids **Moderator – Lee Wood, *Southern Utah University, Cedar City, UT***	
9:00 am – 10:00 am	**Mustang management in the western United States –** Gus Warr, *Bureau of Land Management, US Department of the Interior, Erda, UT*
10:00 am – 10:15 am	**Break**
10:15 am – 11:15 am	**Panel Discussion** - Gus Warr, *Bureau of Land Management, US Department of the Interior, Erda, UT,* Kathy DeGonia*, President of Piceance Mustangs, Grand Junction, CO,* Sloane Milstein*, Ed.D., Colorado Mesa University, Grand Junction, CO,* Tammy Pearson, *Beaver County Commissioner, Minersville, UT*
11:15 am – 12:00 pm	**Tools and approaches for exploring 'hot topic' issues in educational settings** – Karin Bump, *NAEAA Executive Director, Cazenovia, NY*
12:00 pm – 1:15 pm	**Lunch and NAEAA General Meeting**
Session 2. Graduate Student Presentations **Moderator – Betsy Greene, *University of Arizona, Tucson, AZ***	
1:15 pm – 1:30 pm	**Continuing impacts of COVID-19 restrictions on collegiate equestrian student engagement and morale** TA Fortune*, ML Santiago, CA Porr, *Murray State University, Murray, KY*

1:30 pm – 1:45 pm	**Development and validation of a basic ground skills assessment for equine-assisted services** SJ Andersen*, M Pate, H Clement, J Smith, Judd-Murray, *Utah State University, Logan, UT*
1:45 pm – 2:00 pm	**Students' perception of teaching tools in online equine courses compared to traditional in-person courses** BL Gibbens*, L Luck, LK Karr, *University of Nebraska-Lincoln, Lincoln, NE*
2:00 pm – 2:15 pm	**A pilot observational study of recreational trail riding for veterans with substance use disorder** KH Hoopes, M Osborne*, WR Marchand, K Joubert, E Nazarenko, H Black, W Klinger, S Sheppard. *Utah State University, Logan, UT; Veterans Affairs Salt Lake City, Salt Lake City, UT*
2:15 pm – 2:30 pm	**Break**
Session 3. In the Classroom and Beyond **Moderator – Lena Luck, *University of Nebraska-Lincoln, Lincoln, NE***	
2:30 pm – 2:45 pm	**Educating horse owners to assess vital signs and other health parameters** EA Greene*, SL Mastellar, *University of Arizona Tucson AZ; Ohio State ATI, Wooster, OH*
2:45 pm - 3:15 pm	**Workshop: Teaching equine nutrition with Feed XL** AS Biddle, AB Johnson, *University of Delaware, Newark, DE*
3:15 pm – 4:00 pm	**Workshop: NAEAA Indicators of Excellence** Karin Bump, *NAEAA Executive Director, Cazenovia, NY*
4:30 pm	**USU Equine Facility Tour, Dinner, and Demonstrations by Local Horse Industry Members**
Thursday, June 2, 2022 (Eccles Conference Center Rooms 205/207)	
Session 4. Teaching Equipment-Related Skills in Equine Programs **Moderator – Sara Mastellar, *Ohio State ATI, Wooster, OH***	
7:00 am – 8:00 am	**Breakfast**
8:00 am – 8:30 am	**Agricultural equipment operation skills desired by employers, use, and safety in the equine industry** SL Mastellar*, K. Bennett-Wimbush, L. Janecka *Ohio State ATI, Wooster, OH; Kentucky Equine Management Internship, Lexington, KY*
8:30 am – 8:45 am	**Discussion: Teaching equipment-related skills in equine programs**
Session 5. Poster Session	
8:45 am – 9:30 am	**Break**
poster	**Ride Utah! Veteran participants' safety on trail rides** AP Shank*, *Utah State University, Logan, UT*

poster	**Teaching Tip: Stringing it all together** SL Mastellar*, *Ohio State ATI, Wooster, OH*
poster	**Equine science students investigate sustainable management practices of free-roaming horses in eastern Kentucky** LG Brock*, KL Kaufman, *Morehead State University, Morehead, KY*
Session 6. Use of authentic learning experiences to improve student skillsets Moderator - Betsy Greene, *University of Arizona, Tucson, AZ*	
9:30 am – 9:45 am	**Survey of students' perceptions of using online case scenario examination during COVID-19 pandemic** EM Abdelfattah*, FJ Navas-Gonzalez, AK McLean, *UC Davis School of Veterinary Medicine, Davis, CA; University of Cordoba, Spain*
9:45 am – 10:00 am	**Preliminary study of the contraceptive effect of a self-assembling intrauterine device (iUPODs) in mares maintained in a paddock with a fertile stallion** KH Hoopes*, DM Gradil, DK Vanderwall, H Clement, BA Sarnecky, Chris Davies. *Utah State University, Logan UT*
10:00 am – 10:15 am	**Equine parturition as an experiential learning exercise** HM Clement*, *Utah State University, Logan, UT*
10:15 am – 10:30 am	**Break**
Session 7. Building Community and Resources for Equine Academics	
10:30 am – 11:30 am	**Student Panel and Discussion: Helping under-represented students feel more networked to the industry, the department, and the field of equine science** J. K. Suagee-Bedore, C. Heleski, D. Powell, K. Bump, G. Parks, S. Rigg, *Virginia Tech, Blacksburg, VA; University of Kentucky, Lexington, KY; Hocking College, Nelsonville, OH; NAEAA Executive Director, Cazenovia, NY; ProTrition Feed, LLC, Cookeville, TN; University of New Hampshire, Durham, NH*
11:30 am – 12:15 pm	**Workshop: Developing a periodic census of US undergraduate equine programs** RK Splan, CA Porr, AS Biddle, L Luck, K Cole, CJ Stowe, *Delaware Valley University, Doylestown, PA; Murray State University, Murray, KY; University of Delaware, Newark, DE;* University of Nebraska-Lincoln, Lincoln, NE; *The Ohio State University, Columbus, OH; University of Kentucky, Lexington, KY*
12:15 pm – 1:30 pm	**Lunch and Awards Presentation**
1:30 pm	**Adjourn and Safe Travels Home!**

Session 1. Workshop: Teaching Controversial Topics, with Emphasis on Management of Feral Equids

Moderator – Lee Wood, Southern Utah University, Cedar City, UT

More information in Appendix A: Handouts from the Bureau of Land Management.

Mustang management in the western United States

Gus Warr, Bureau of Land Management, US Department of the Interior, Erda, UT
Kathy DeGonia, President of Piceance Mustangs, Grand Junction, CO
Sloane Milstein, Ed.D., Colorado Mesa University, Grand Junction, CO
Tammy Pearson, Beaver County Commissioner, Minersville, UT
Eric Thacker, PhD, Range Management Specialist, Utah State University, Logan, UT

Tools and approaches for exploring 'hot topic' issues in educational settings

Karin Bump, NAEAA Executive Director, Cazenovia, NY

Working with hot topic controversial issues in undergraduate education has a variety of benefits to student learning. Among these are improvements in critical thinking and a greater understanding of civic responsibilities. At the same time, discussion of controversial issues can become heated and even hurtful without a pedagogical approach that manages and regulates for respectful dialogue. One such tool is the Toulmin Method for Argument Analysis. Created by late philosopher Stephen Toulmin (2003), the method involves breaking out statements of fact into various components, most notably the claim, evidence, and warrant. In this session, the Toulmin method will be introduced, and then utilized to debrief and explore the information presented by the Guest Speaker and panelists regarding Wild Horse and Burrow management; a topic often seen as controversial. In doing so, attendees will leave having experienced the Toulmin Method first-hand and be able to utilizes it within their home institutions and communities.

More information in Appendix B: Toulmin handout.

Session 2. Graduate Student Presentations

Moderator – Betsy Greene, University of Arizona, Tucson, AZ

Continuing impacts of COVID-19 restrictions on collegiate equestrian student engagement and morale

TA Fortune, ML Santiago, CA Porr, Murray State University, Murray, KY*

Previous research has shown that COVID-19 biosecurity restrictions had a negative impact on collegiate students' morale. Even though mandated restrictions are beginning to ease, they are still required in many university classrooms and athletic events. While some collegiate equestrian teams have returned to a more normal practice and competition schedule, continued requirement for biosecurity measures may impact student experiences and behaviors. The objective of this study was to evaluate the continuing effect of COVID-19 restrictions on collegiate equestrian team student engagement and morale. A survey was developed in SurveyMonkey® and distributed to coaches for six collegiate equestrian organizations: Intercollegiate Horse Show Association, Intercollegiate Dressage Association, National Intercollegiate Rodeo Association, National Collegiate Equestrian Association, Intercollegiate Eventing, and Intercollegiate Polo. The survey was open for five weeks and collected 24 usable responses. Descriptive statistics were completed using Microsoft Excel. Restrictions related to COVID-19 continued to impact students in 2021. During the spring 2021 semester, 37.5% (n=9/24) of teams were able to practice but not show. In contrast, all 26 responses (100%) indicated teams were able to do both in the fall 2021 semester. Compared to a previous survey, the most common restrictions continued to include social distancing and hand sanitizer use, but the incidence of each decreased. From spring to fall 2021, social distancing restrictions decreased from 79.2% (n=19/24) to 66.7% (n=16/24), and hand sanitizer use decreased from 70.8% (n=17/24) to 50% (n=12/24). Attitude and socialization continued to be negatively impacted (58.3%, n=14/24, and 54.2%, n=13/24, respectively), however, dedication improved (70.8%, n=17/24). Based on responses, increased ability to practice and compete appears to have improved student dedication, but continued restrictions still have a negative impact on student morale.

Development and validation of a basic ground skills assessment for equine-assisted services

SJ Andersen, M Pate, H Clement, J Smith, Judd-Murray, Utah State University, Logan, UT*

Equine-assisted services (EAS) incorporate the interaction of humans who face mental, physical, emotional, and/or social challenges and equines for therapeutic purposes. Recreational, physical, mental, social, and/or emotional goals are met through various EAS such as therapies, learning, and horsemanship. Due to equine size and fight or flight tendencies, equine's should be carefully chosen for their roles in EAS programs. Utah State University's EAS program produced and validated an assessment tool used to evaluate equines for suitability in EAS unmounted programs. This assessment tool was designed to meet the recommendations of those in the equine industry seeking to reduce equine-related human injuries as well as the Professional Association of Therapeutic Horsemanship International (PATH) standards. PATH states that EAS centers should use an unbiased equine assessment tool to conduct equine evaluations. Thus, the Basic Ground Skills Assessment (BGSA) was created and tested for inter-rater reliability, intra-rater reliability, and validity. Through scoring by EAS professionals and collection of equine physiological parameters of stress including heart rate and serum cortisol levels, the BGSA was demonstrated to be reliable and valid. These results could lead to the use of the BGSA as a standardized evaluation tool for EAS unmounted programs. Additionally, use of the BGSA has the potential to decrease the occurrence of unmounted human injuries caused by equine stress related behaviors by screening equines with a validated assessment tool prior to their involvement in EAS.

Students' perception of teaching tools in online equine courses compared to traditional in-person courses

BL Gibbens, L Luck, LK Karr, University of Nebraska-Lincoln, Lincoln, NE*

Online learning has become the new "normal" when it comes to post-secondary education. Over the last few years, significant changes in education have resulted in an increased number of online courses. Approximately 28% of students seeking higher education participate in at least one online course and 14% are enrolled exclusively in distance or online programs (Allen and Seaman, 2016). However, courses that are typically hands-on, like equine science, may be more challenging online. The hands-on experiences in equine science classes help prepare students for future careers. Due to an increase in students choosing to take courses online, a review of online teaching methods was conducted to determine students' preferred teaching tools in an online equine course. The survey was sent out to approximately 10 universities that offer equine science courses online through members of the National Association of Equine Affiliated Academics (NAEAA) and equine program directors to solicit student participation. Participation was limited to college students that had previously or were currently enrolled in an online equine-focused course and was completely voluntary. Of the 77 respondents, 71 (92%) were female, 6 (8%) males, and the majority (95%) white. The primary reasons students chose an online equine science course was because it fit their schedule better (n = 8; 24.5%) and the course was only offered online (n = 36; 23.2%). Students found videos (n = 62; 92.5%) and readings (n = 57; 85.1%) were extremely or somewhat beneficial teaching methods in online equine courses. Half (n = 34; 50.8%) of the students felt they learned as much in their online courses as in a traditionally taught equine course. Additionally, students indicated they received a quality education in equine science courses whether taught online (n = 55; 82.1%) or in a traditional in-person (n = 49; 73.1%) format.

A pilot observational study of recreational trail riding for veterans with substance use disorder

KH Hoopes, M Osborne, WR Marchand, K Joubert, E Nazarenko, H Black, W Klinger, S Sheppard. Utah State University, Logan, UT; Veterans Affairs Salt Lake City, Salt Lake City, UT*

Military veterans experience high rates of addictive disorders. Effective treatments exist, however challenges include partial effectiveness of current interventions, treatment resistance, and high relapse rates. Complementary approaches, such as equine-assisted interventions (EAIs), have the potential to enhance treatment engagement and response among this population. There is a growing body of evidence that EAI participation may result in reduction of anxiety and depressive symptoms as well as enhanced quality of life and improved interpersonal interactions and resilience. A recent study was conducted to assess the safety, feasibility, and preliminary outcomes of recreational trail riding for veterans with addictive disorders. The study was a joint pilot project conducted by Utah State University Equine Extension and the United States Veterans Health Care Administration Medical Center. Participants were 18 veterans; 13 males and 5 females. All had at least one addictive disorder. A recreational trail ride of approximately two hours duration was conducted. Pre- and post-intervention evaluation instruments, included The State-Trait Anxiety Inventory, Craving Experience Questionnaire, Positive and Negative Affect Scale and Conner-Davidson Resilience Scale were utilized to assess changes in anxiety, craving, affect, and resilience, respectively. Regarding psychological instruments score changes pre- to post-intervention, Wilcoxon signed rank tests revealed statistically significant changes pre- to post-intervention in scores, with large effect size, for the STAI, CEQ, and PANAS positive and negative; the medians of the differences for these measures are − 3.34, − 4, + 3, − 5.5, respectively; the 95% confidence intervals are (− 13.3, − 1.7), (− 14, − 2), (1.5, 6.5), (− 8.5, − 3), respectively. There was not a statistically significant increase in resilience, as measured by the CDRS. Results indicated the intervention was safe and feasible to utilize as there were no adverse outcomes to patients, staff, or equines. There were significant pre- to post-intervention decreases in anxiety, negative affect and craving as well as increased positive affect. Resilience increased but did not reach statistical significance. These results indicate that recreational trail riding is safe and feasible to utilize for this population. Preliminary outcomes suggest that this intervention has the potential to be beneficial to for veterans with addictive disorders. Lastly the psychological instruments used in this intervention appear to be appropriate for use in future investigations.

Session 3. In the Classroom and Beyond

Moderator – Lena Luck, University of Nebraska-Lincoln, Lincoln, NE

Educating horse owners to assess vital signs and other health parameters

EA Greene, SL Mastellar, University of Arizona Tucson AZ; Ohio State ATI, Wooster, OH*

While horse owners/enthusiasts can often recite normal horse vital sign values, they sometimes lack competency in taking horses' vital signs. Observation skills are key to good management. The Southern Arizona Equine Health Symposium organizers intentionally plan several "Horses 101" topics targeting new horse owners (or as refreshers). One session to teach/improve horse owners' abilities to take vital signs was "Horses 101: Knowing What's Normal" offered in 2019 and 2020. A hands-on session was not possible during the virtual event in 2021, but it was offered again in 2022. A survey was administered to evaluate the impact of the session (n=69 total respondents). Evaluations gathered attendees' views on degree of usefulness for horse care decisions, intended changes in attendee behavior, instructor effectiveness, and knowledge gained in each presentation (Likert scale from 1-very little to 5-very much). For this session respondents reported that they found the session very useful (4.6 ± 0.5; average ± SD) and that they plan to change their management as a result (4.3 ± 0.8). The instructor presented clearly (4.5 ± 0.6) and they gained knowledge (a 1.2 ± 1.1 improvement over prior knowledge). A need was identified for a comprehensive document with a systematic approach to observe and assess horses in one's care to support this programming. A publication (https://tinyurl.com/KnowingNormal) was developed based on the "Knowing Normal" workshops and utilizing undergraduate course laboratory activities, providing an excellent overview of major vital signs. It has extensive pictorial explanations describing each observation with normal (green)/abnormal (red) column examples. Over 200 copies were distributed at the 2022 event.

Workshop: Teaching equine nutrition with FeedXL

AS Biddle, AB Johnson, University of Delaware, Newark, DE

Are you looking for an engaging and flexible way to teach equine nutrition to undergraduate students? FeedXL is an online equine nutrition platform that includes a deep database of common equine feedstuffs in the US, Australia, and Europe. FeedXL also permits the user to upload their own hay, pasture and feed analyses to their user portal. FeedXL allows users to formulate equine diets for unique needs or conditions and produces a comprehensive diet analysis and actionable dietary recommendations following NRC guidelines. The FeedXL dietary nutrient report includes digestible energy, crude protein, lysine, minerals, vitamins, and total intake values. And, access is free for educators!

In this presentation we will demonstrate how FeedXL works, share how we are using this program in our Equine Nutrition class, and give participants the opportunity to brainstorm ways that this program could be used in their classes. Participants will leave with experience with FeedXL, ready to use activities, and a list of ideas from other participants to implement in their own courses.

More information in Appendix C: FeedXL presentation slides & access instructions.

Workshop: NAEAA Indicators of Excellence

Karin Bump, NAEAA Executive Director, Cazenovia, NY

In 2010, members of the National Association of Equine Affiliated Academics engaged in a series of working sessions to develop an initial list of 'Indicators of Excellence (IOE)' for undergraduate programs of study in the equine disciplines. That initial list was then used in a 2011 survey of members to gauge the level of importance of each indicator along with the ease in which respondents felt data could be gathered and used to assess both student and program success in each area. Through ongoing discussion and collaboration, identification of five IOE Constructs for building and evaluating programmatic excellence were determined: Equine Student Knowledge and Skills; Critical Thinking and Communication; Trajectory of Graduates; Program Reputation; and Program Sustainability. Through additional discussions, workshops, input from working groups, and limited site application, a toolkit for use in internal and/or external academic review and/or self-study was established. More than ten years after the initial discussions, the materials have again been reviewed with updates geared towards streamlining the process for wider application. The tool kit is now ready for member input for a renewed launch in 2022-2023.

More information in Appendix D: Indicators of Excellence document draft.

Session 4. Teaching Equipment-Related Skills in Equine Programs

Moderator – SL Mastellar, Ohio State ATI, Wooster, OH

Agricultural equipment operation skills desired by employers, use, and safety in the equine industry

SL Mastellar, K. Bennett-Wimbush, L. Janecka Ohio State ATI, Wooster, OH; Kentucky Equine Management Internship, Lexington, KY*

Livestock and equipment cause most reported injuries in agricultural industries. However, courses in agricultural equipment operation are not required in all equine programs. Employees in the equine industry possess horse handling skills but may lack training in equipment operation.

Study 1: An analysis of job postings was used to quantify the need for agricultural equipment operation skills in the equine industry as expressed in job postings. Equine industry job postings (n = 77) were collected between June 2020 and February 2022. Criteria for inclusion were being full time positions, having reasonably detailed job descriptions, and judged by faculty to be of potential interest to graduates of Ohio State ATI's equine programs. Job postings from 22 states were included, but the greatest shares of the postings were from Kentucky (22%) and Ohio (17%). For those postings listing pay (n=39), projected earnings were $36,000 ± $10,000 (average ± SD). Most (64%) postings explicitly stated that a driver's license was required, but only one posting explicitly required a CDL. Most (53%) postings did not mention agricultural equipment operation; however, some (36%) explicitly listed those as required skills. Tractors were mentioned in 19 postings and trailers in 18 postings as the two most prevalent types of equipment listed.

Study 2: A survey of equine industry supervisors (n = 53, 2020-2021) was conducted to explore agricultural equipment use on commercial horse farms. The survey was sent to supervisory managers identified through internships, alumni, and the Kentucky Equine Management Internship (KEMI). Tractors (73%), ATVs (90.9%), riding mowers (87.5%) and hand operated equipment (95.5%) were the most common employee operated agricultural equipment. The percentage of employees that were reported to operate equipment ranged from 69% for UTVs to 41% for truck/trailers. Safe operation of equipment was extremely important (85, 77.8 and 63%) for tractors, truck/trailers and mowers respectively. Over 95% of farms trained employees individually on operation and safety, however only 54% reported skill evaluation/testing following training. Minor (< $1,000) property damage caused by employee operated agricultural equipment was reported by 40.7% of supervisors for a 3 year period, fortunately no serious injuries or fatalities were reported.

Discussion questions:

1. Does your curriculum include any training on agricultural equipment operation and /or safety?
    a. If yes, explain the course / module that the students complete?
    b. Is the course / module hands on?
        i. If yes, approximately how much instructional 'seat time' in hours do students acquire?
    c. Who teaches the course / module?
    d. If taught within the university, how is this course/module funded?
2. If your college / university does not offer training, do you see the need for a course / module or other type of training for your undergraduate majors?
3. What barriers are there to building this skillset in students?

Link to survey to respond in real-time during the workshop:
https://osu.az1.qualtrics.com/jfe/form/SV_3J116rbMhzh0GY6

Acknowledgements: Special thanks to Mark Schleppi and Debra Powell for providing course materials to facilitate discussion during this workshop.

More information and resources in Appendix E: Resources for teaching agricultural equipment operations skills, including:

- Example syllabi
- Links to further resources mentioned in the discussion
- Rubrics shared after conference

Session 5. Poster Session

Ride Utah! Veteran participants' safety on trail rides

AP Shank, Utah State University, Logan, UT*

Participant safety on recreational horseback trail rides is critical for success, given that trail riding is considered an inherently dangerous activity due to the prey nature of horses. The aim of this study was to address the variety of preventative safety measures available for trail riding with participants made up of veteran military members. Considered in the findings were included, but not limited to: initial trail selection and suitability for beginning riders, assessment of trail hazards (such as water crossings) that can pose issues for participants or equines, and a staff evaluation of all tack and equipment for proper fit and safety prior to mounting. When considering the veteran participant personal safety equipment, it was recommended to include an ASTM/SEI certified equestrian helmet that had been properly fitted, safety vests, and emergency information/medical information armbands that remained visible and are accessible to pertinent staff when riding. Pertinent equine information was given to participants to ensure safety in basic horsemanship commands (stop, start, and steer), fall prevention, seat and balance techniques, and mitigation of natural equine behaviors such as stopping to graze, or trotting to catch up to a faster horse. All these skills were valuable tools available to the veteran rider that were used to manage their equine mount. Trail riding, while incredibly beneficial to wellness, is an inherently dangerous activity and should only be implemented by knowledgeable professionals capable of addressing and implementing recommended safety measures into their programs.

Keywords: *horseback riding, trail riding, veteran, personal safety equipment*

Teaching Tip: Stringing it all together

SL Mastellar, Ohio State ATI, Wooster, OH*

Activities involving creation foster engagement with material in ways that can help students remember. These activities help students connect pieces of information that they may otherwise struggle to connect when learning through lecture, reading, or even demonstration. However, large three dimensional projects can create logistical issues regarding implementation, collection for evaluation, storage, and display. The following are two activities that use string, so are relatively easy to implement, store, and display.

Digestive tract: Students are tasked with creating an educational display demonstrating the length of the equine digestive tract using string. The length of the different colored strings used correlate to the length of the various digestive organs. Students indicate where digestive secretions are added, nutrients are absorbed and digested along the way. The display is affixed to a classroom building hallway for one year. Each class was challenged to create a better product than the previous year's students (Figure 1).

Figure 1: Representations of the equine digestive tract by students.

Lower limb: Students are tasked with creating a simplified moving representation of lower limb anatomy with a suspensory ligament, a flexor tendon, and an extensor tendon (Figure 2). When pulled the strings flex or extend paper bones held together with brass fasteners. Tape is used on attachment points to affix the string to the paper bones. Considerable appreciation is gained for how the structures of the lower limb interrelate. Each student can take their model with them for later study.

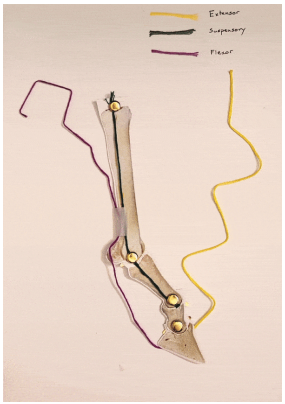


Figure 2: Portable working representation of equine lower limb anatomy.

These two activities are examples of learning via creation using string in the equine sciences.

Equine science students investigate sustainable management practices of free-roaming horses in eastern Kentucky

LG Brock, KL Kaufman, Morehead State University, Morehead, KY*

Since 1970, there has been a tradition of free-roaming horses in Eastern, Kentucky on reclaimed coal mines. For many years this was a sustainable practice to winter horses on these lands. Following the economic downturn in 2008, the population of horses grew beyond a sustainable level as a result of unwanted horses being permanently released. Morehead State University Equine students were tasked with understanding and evaluating the local non-profit organization's management of the free-roaming herd. The criteria of evaluation included pasture management, herd identification, horse health, and population control methods. Throughout this process, students utilized critical thinking and problem solving skills as well as knowledge gained in undergraduate coursework to optimize the sustainable management of free-roaming horses. Based on their findings, application strategies were presented to the community of Eastern, Kentucky.

Session 6. Use of authentic learning experiences to improve student skillsets

Moderator - Betsy Greene, University of Arizona, Tucson, AZ

Survey of students' perceptions of using online case scenario examination during COVID-19 pandemic

EM Abdelfattah, FJ Navas-Gonzalez, AK McLean, UC Davis School of Veterinary Medicine, Davis, CA; University of Cordoba, Spain*

The COVID-19 pandemic presented new challenges to both students and faculty. The push to keep students engaged and facilitate stimulating learning environments in absence of valuable in-person interaction spurred faculty to incorporate novel pedagogical and examination methods into their curricula. The objective of this survey was to determine student preference for case-scenario over traditional in-class/in-person examinations as an online assessment method during the COVID-19 pandemic. A total of 112 students enrolled in Equine Behavior (n=70) and Welfare and Equine Exercise Physiology (n =40) courses respectively were voluntarily asked to complete an online questionnaire during the winter quarter of 2020. The survey consisted of 18 questions targeting students' opinions and perceptions regarding the case scenario exams. A total of 88 (78.6%) completed responses were received from a total of 112 students. Approximately, half of the students (45.5%) slightly or strongly disagreed with offering remote exams in a traditional format with multiple-choice and true-false questions. The majority of respondent students (75.1%) strongly agreed that case scenario exams would prepare them better for a career in the equine industry compared to traditional exams. In conclusion, this study demonstrated that case scenario exams could be used as a replacement for traditional exams in equine courses during online teaching.

Preliminary study of the contraceptive effect of a self-assembling intrauterine device (iUPODs) in mares maintained in a paddock with a fertile stallion

KH Hoopes, DM Gradil, DK Vanderwall, H Clement, BA Sarnecky, Chris Davies. Utah State University, Logan UT*

There is an urgent need for practical methods of population control (i.e., contraception and/or sterilization) for free-roaming (i.e., “wild” or “feral”) horses and burros on Western Public Lands in the United States. The objective of this study was to evaluate the contraceptive efficacy of a novel self-assembling three-part polymer-coated magnetic intrauterine device termed as an intrauterine POD (self-assembling; iUPOD) when there are natural breeding conditions when iUPOD use was managed by veterinary professionals with no prior experience with the device. Six mares were administered an iUPOD and were then housed continuously with a fertile stallion for 91 days. The intrauterine POD retention and contraceptive efficacy were 100%. Two mares had prolonged corpus luteum function (for 37 and 91 days) immediately after iUPOD placement. For the estrous cycles of the other mares, the duration of diestrus was 7.8 ± 2.7 days (mean ± S.D.). Four of the mares (67%) became pregnant when in a paddock with the same stallion the year after iUPOD removal. These results are encouraging for use of the iUPOD as a practical and reversible method of fertility control in free-roaming horses and burros.

Equine parturition as an experiential learning exercise

HM Clement, Utah State University, Logan, UT*

Utah State University (USU) offers a Bachelor of Science Degree in Animal, Dairy and Veterinary Sciences with an emphasis in Equine Science and Management. An Equine Breeding Program was established to create learning opportunities for undergraduates with respect to mate selection, equine reproduction, colt starting, sales preparation, marketing and ultimately an annual sale to generate revenue and to publicly promote the degree emphasis. In the industry, opportunities to experience equine parturition are often rare. Likewise, student exposure to equine parturition at USU was an area of the curriculum that had not been explored prior to 2016. With the aim of producing graduates familiar with equine parturition and post-natal care, an elective course (Equine Parturition and Post-Natal Care) was successfully developed by the author which includes both undergraduate and veterinary student participants. Lecture is designed to create a foundation of understanding and to specify objectives for student success. Experiential learning is emphasized through repeat peri-partum exams and using multiple technologies to complement identification of imminent parturition and maximize student exposure to each parturition event. Students ultimately form teams for overnight observation and to be on-site to attend each parturition event. Personal mentoring throughout the progression of each case is structured to encourage both student autonomy and support. Weekly class meetings are designed to discuss parturition events, explore questions and events unique to each mare and foal in a way that will amplify learning opportunities for the entire class as each student will have different experiential experiences. Approximately 40 students benefit each spring from this unique course.

Session 7. Building Community and Resources for Equine Academics

Student Panel and Discussion: Helping under-represented students feel more networked to the industry, the department, and the field of equine science

J. K. Suagee-Bedore, C. Heleski, D. Powell, K. Bump, G. Parks, S. Rigg, Virginia Tech, Blacksburg, VA; University of Kentucky, Lexington, KY; Hocking College, Nelsonville, OH; NAEAA Executive Director, Cazenovia, NY; ProTrition Feed, LLC, Cookeville, TN; University of New Hampshire, Durham, NH

Students from historically marginalized (HM) communities, such as Black, African American, Hispanic, LatinX, Indigenous American, and Asian, constitute a small percentage of animal science and equine science undergraduate student populations. For instance, HM students represent 10 and 18.7% of the animal and equine science student populations at Virginia Tech and the University of Kentucky, respectively. These students continue to suffer from what can be interpreted as institutional racial ignorance and institutional exploitation- which then influences these students' opportunities for success in the equine industry. Within the field of animal science these issues have been the subject of minimal research, with one article in the Journal of Animal Science and two in the NACTA Journal. Although one of these manuscripts addressed perceptions of racism and discrimination among students in a College of Agriculture, none investigated methods of improving relationships between HM student populations, faculty, and industry employers. This workshop focuses on elucidating concerns of HM students and helping NAEAA members develop toolkits for improving relationships and promoting diversity of representation at their home institutions. A student panel will interact with NAEAA members with the goal of open dialogue, learning to disrupt our own biases, and fostering a sense of community.

Resources in Appendix F: DEI workshop handouts, including:

- Vocabulary of DEI
- Personal reflection worksheet

Workshop: Developing a periodic census of US undergraduate equine programs

RK Splan, CA Porr, AS Biddle, L Luck, K Cole, CJ Stowe, Delaware Valley University, Doylestown, PA; Murray State University, Murray, KY; University of Delaware, Newark, DE; University of Nebraska-Lincoln, Lincoln, NE; The Ohio State University, Columbus, OH; University of Kentucky, Lexington, KY

Purpose: Since their origin nearly a century ago, equine affiliated academic programs have realized substantial growth in number, enrollment, and scope among American institutions of higher education. This expansion has been the result of several factors, including shifts in the horse's role in society, and perceived value of an undergraduate degree among those who desire a career in, or adjacent to, the horse industry. However, continued expansion of undergraduate equine programs is not guaranteed, especially given wide-spread contemporary challenges at the institutional level, such as inherent program costs, variable administrative support, and inadequate facilities and/or staffing. For these reasons, the NAEAA Research Committee proposes a quinquennial or decennial census of all U.S. undergraduate equine programs, in which demographic and programmatic data will be collected, analyzed, and summarized, thus providing a novel information resource that can be used for programmatic decision-making, funding requests, and internal or external communication. The purpose of this 45-min workshop is to engage in a conversation regarding current institutional challenges and identify what type(s) of data NAEAA members feel are most meaningful to collect, analyze, and summarize as part of this longitudinal study. Upon completion of the workshop, the NAEAA Research Committee will further refine the census instrument and identify as many participant equine programs as possible both within and outside the NAEAA organization. It is anticipated that the program census would begin in the fall of 2022.

Keywords: *Program analysis, faculty survey, academic census*

2022 NAEAA Awardees

Congratulations awardees!
The National Association of Equine Affiliated Academics (NAEAA) is pleased to be honoring faculty and staff at the 13th Annual NAEAA Conference May 31st-June 2nd, hosted by Utah State University. The NAEAA Don Henneke Educational Impact Award was created in 2013. For the rest of the awards, this is the inaugural year for their awarding. Please join us in congratulating the awardees.

Junior Faculty Award

Aubrey Jaqueth, Ph.D., Wright State University

Aubrey Jaqueth holds a 70% teaching position at Wright State University, Lake Campus. In the last three years, she has revised 10 different courses and serves as a faculty advisor for the Collegiate Young Farmers Club. She has authored or co-authored multiple publications and given numerous academic and professional presentations, including one focused on the scholarship of teaching and learning. Finally, she has received several grants supporting teaching methodology.

Senior Faculty Award

Bob Coleman, Ph.D., University of Kentucky

Bob Coleman has had extensive involvement in multiple equine-affiliated organizations, including the ESS, ARPAS, NAEAA, AQHA, KyQHA, and CHA. At the University of Kentucky, he serves as an advisor for the equestrian team and Collegiate Professional Horseman's Association. He has experience teaching from an extension perspective, including eXtension Horses, as well as in the classroom, where he teaches Facility Design and Management, Tack and Tools, and the Equine Capstone. Bob's many publications are typically extension based, but are also highly collaborative and interdisciplinary. He has also received the 2019 ASAS Distinguished Teacher Award and has been acknowledged as an ASAS and ESS Fellow.


Photo credit: Crystal Smith

Don Henneke Educational Impact Award

Betsy Greene, Ph.D., University of Arizona

Betsy Greene, a professor and extension horse specialist at the University of Arizona, has been involved in teaching in a variety of ways, and has reached a global audience with her work. A large body of innovative research predominantly in the area of equine extension has covered topics such as helmet use for safety in 4H equine programs, equine health care and biosecurity in multiple languages, and various methods of delivering information including use of webinars, infographics, and podcasts. She often collaborates with industry and tribal groups, as well as students at the university. Betsy was also one of the original innovators for eXtension Horses.

Teaching Award

Angelo Telatin, Ph.D., Delaware Valley University


Photo credit: Crystal Smith

Angelo Telatin has used innovative methods to support teaching and communication at Delaware Valley University. His work includes multiple examples of hands-on teaching of students in both riding and lecture-based courses, and his methods have been widely recognized. He has been an invited speaker at multiple universities as well as industry events such as Equine Affaire and the Horse World Expo. Angelo is a board member for the International Society of Equitation Science, where he was instrumental in coordinating a recent conference in Rome. He has received international recognition for his work in equitation science.


Photo credit: Crystal Smith

Research Award

Shea Porr, Ph.D., Murray State University

Shea Porr has guided 20 undergraduate and 13 graduate students through research projects in the last 10 years at Murray State University. In the last three years, work with her students has resulted in over 20 peer-reviewed publications and/or presentations. Much of her work has been collaborative and interdisciplinary, working with both other departments at Murray State as well as other universities. Work focused on the

scholarship of teaching and learning has included evaluating challenges face by equine faculty, and using LinkedIn as a teaching tool in equine science classes. Shea served as a member and/or chair of the Student Competition Committee for several years for the Equine Science Society. She currently serves on the NAEAA board and is the chair for the Awards Committee and a co-chair of the Research Committee.

Service Award

Sara Mastellar, Ph.D., Ohio State ATI


Photo credit: Crystal Smith

Sara Mastellar, from the Ohio State ATI, has made significant accomplishments in the area of service. She has collaborated on publications and workshops covering topics such as “Knowing What is Normal for Your Horse”, and has been involved with eXtension Horses. She currently serves on the NAEAA board and is a co-chair for the Communications Committee. She started a book club that held weekly discussions, which was very well received. During the COVID-19 pandemic shutdown, Sara coordinated collection of online teaching resources aimed at helping equine educators. She has been responsible for transitioning to the current NAEAA website and she administers NAEAA’s social media presence. Sara is the chair of the ESS Teaching and Extension Committee.


Photo credit: Crystal Smith

Support Staff Award

Jenna Reigle, Delaware Valley University

Jenna Reigle has coordinated the breeding program at Delaware Valley University for many years. She handles care, feeding, breeding, registration, and sales prep for Standardbreds, Thoroughbreds, and sport horses. Between 2019 and 2021, she increased the herd from 12 to 23 mares, and increased the income from yearling sold. She coordinates animals and facility use for teaching, serves as an advisor for Sigma Alpha, and helped design an internship program for Equine Science and Management students. From a service prospective, Jenna is involved with InspireU – a program designed to engage K-12 youth, and she meets with prospective and incoming students.

Appendix A: Handouts from the Bureau of Land Management

WILD HORSE AND BURRO PROGRAM

Highlights from Fiscal Year 2021

The Bureau of Land Management celebrated 50 years of managing and protecting herds under the Wild Free-Roaming Horses and Burros Act in fiscal year (FY) 2021. The BLM's Wild Horse and Burro Program hit several major milestones and set records on its path toward achieving sustainable populations of wild horses and burros on healthy public rangelands. Annual adoption and sale totals soared to new heights under the Adoption Incentive Program, reaching levels not seen in more than 20 years. At the same time, field offices continued to ramp up gathers and fertility control efforts as population estimates indicated some progress toward appropriate management levels. The need to reduce overpopulation remains imperative as the West continues to experience harsh drought conditions.

ADOPTIONS AND SALES

Incentives for adopting untrained animals and a spike in the number of animals trained through partner programs helped the BLM place more than 8,600 wild horses and burros into good homes in FY 2021.

Wild Horses and Burros Adopted and Sold Since 1997

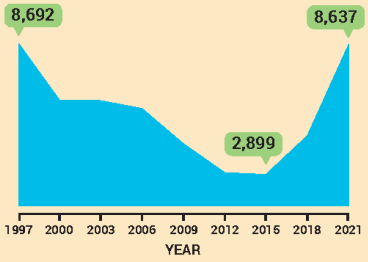


photo by Ann Bond

Total placements reached the highest level since 1997

OFFSITE EVENTS

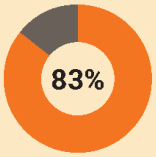
In addition to being available for adoption at dozens of BLM facilities across the West, the BLM takes thousands of animals every year to offsite events (mostly east of the Mississippi River) to provide more people the opportunity to bring home a wild horse or burro.

7,129
Wild horses and burros offered for adoption or sale at offsite events

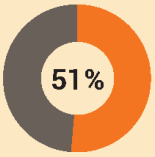
67
Offsite adoption and sale events hosted by the BLM

27
Facilities held adoption and sale events

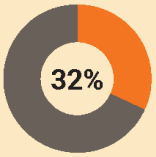
OTHER ADOPTION STATS



Adoption continues to be the primary way wild horses and burros are placed into private care. Of the animals that were placed into private care through adoptions and sales, 83% (5,698 animals) were adopted.



Animals adopted through the Adoption Incentive Program accounted for more than half of all adoptions (3,742 animals).



Almost a third of all animals adopted were trained or gentled (2,729 animals).

3,465
Adoptions and sales facilitated through BLM's national partner, the Mustang Heritage Foundation, setting a new annual record

Mustang HERITAGE FOUNDATION

COMPLIANCE AND TITLING

The BLM conducts mandatory compliance inspections of adopted, untitled animals living in private care. The BLM continues to increase its use of digital tools to complete compliance inspections.

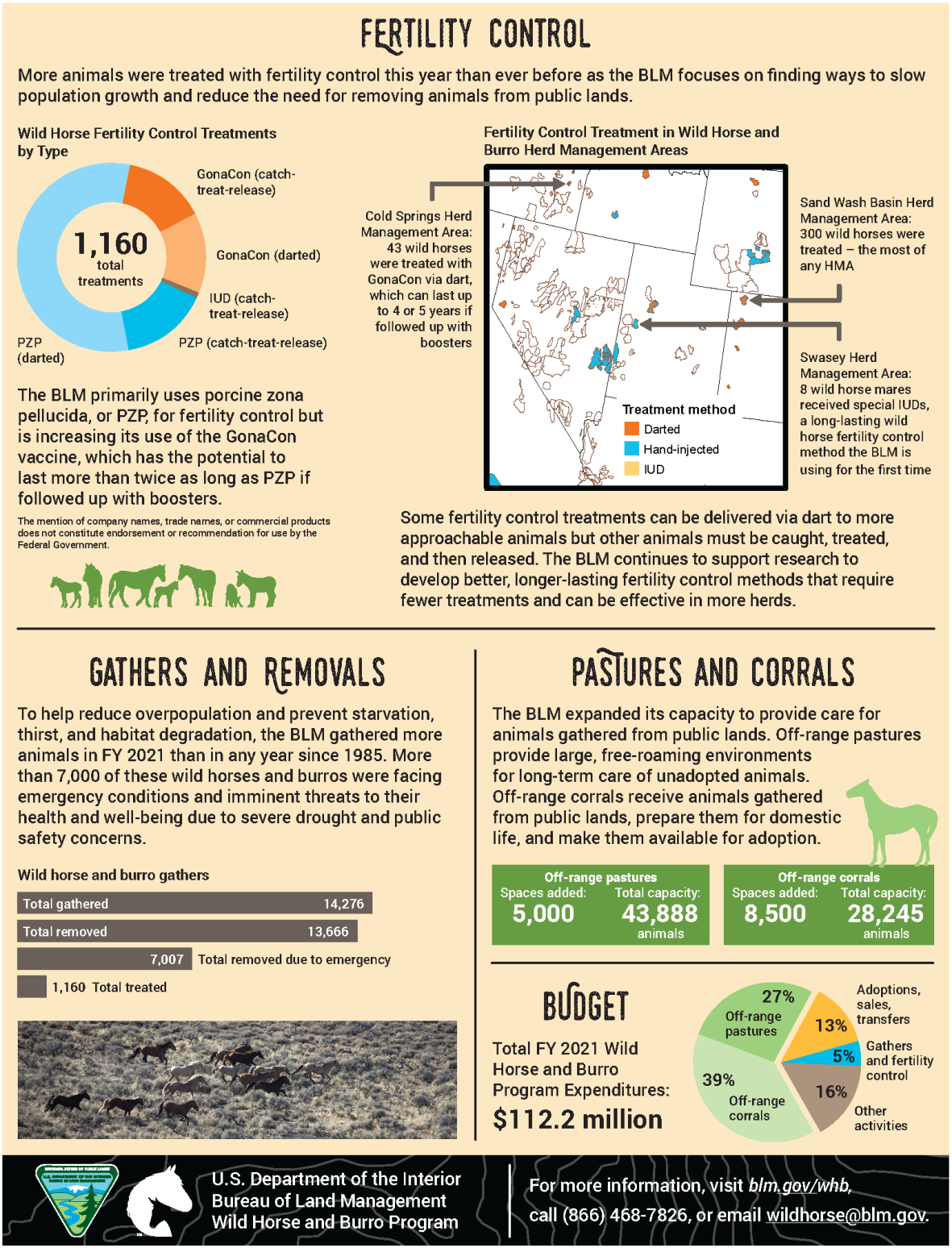
5,041
Compliance inspections conducted

The BLM requires all title applications to be signed by a veterinarian or other authorized officer to ensure the animal is in good health before ownership is transferred from the BLM to the adopter.

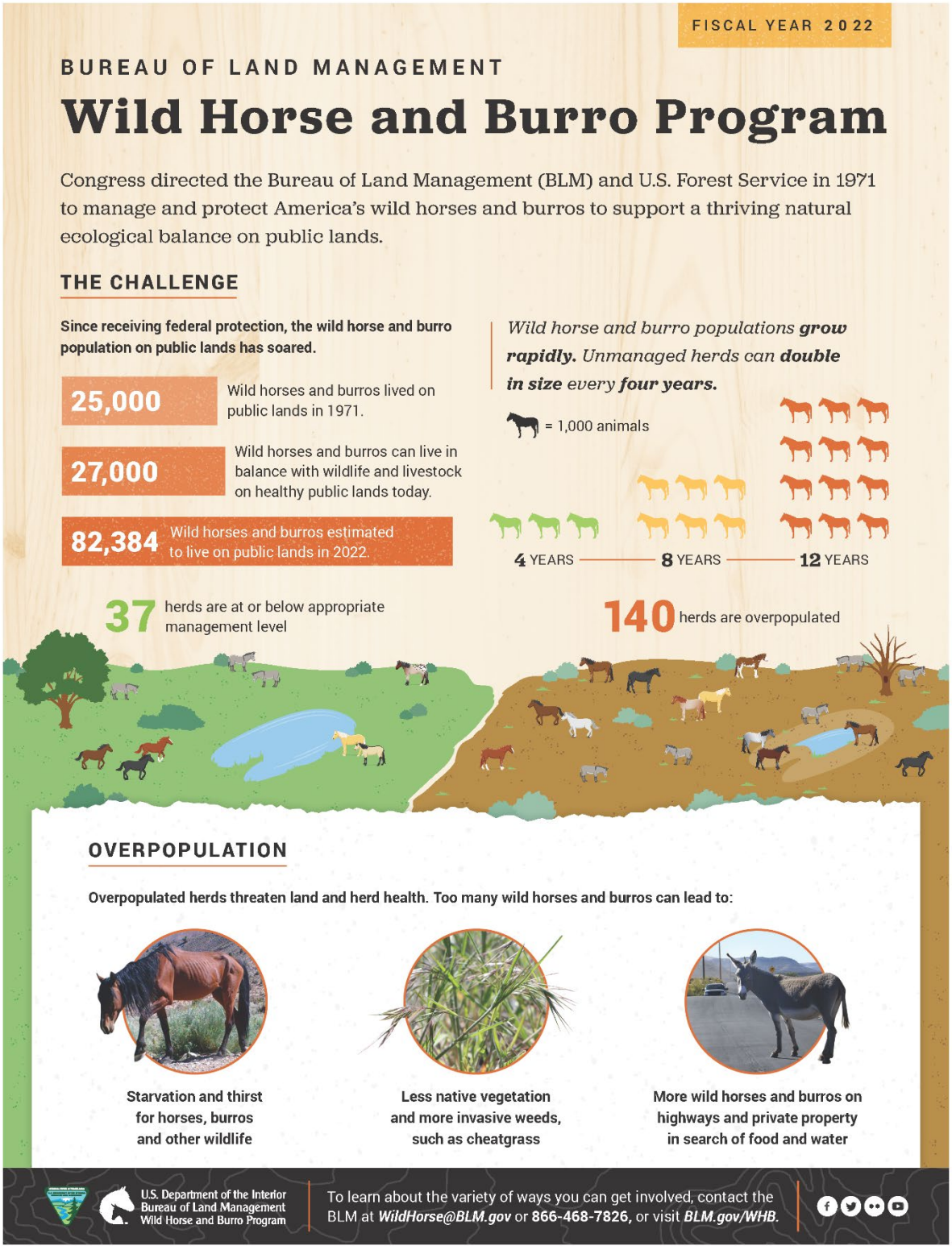
Certificate of Title

4,018
Wild horses and burros titled

Available online: https://www.blm.gov/sites/blm.gov/files/docs/2021-12/FINAL_WHBhighlightsFY2021.pdf



Available online: https://www.blm.gov/sites/blm.gov/files/docs/2021-12/FINAL_WHBhighlightsFY2021.pdf



Available online: https://www.blm.gov/sites/blm.gov/files/docs/2022-04/BLM_WHB_Infographic_FY22_FINAL.pdf

BLM SOLVING THE CHALLENGE

BLM continues to develop and implement new management tools while working with effective partners who share the goal of managing healthy wild horses and burros on healthy public rangelands.

Reduce Overpopulation

Use nonlethal means of gather and removal to achieve a herd size that is in balance with available resources and other uses of the land.

Implement Fertility Control

As herd size reaches appropriate levels, implement population growth suppression methods to slow growth.

BLM is investing in research to develop better fertility control methods and other management tools.

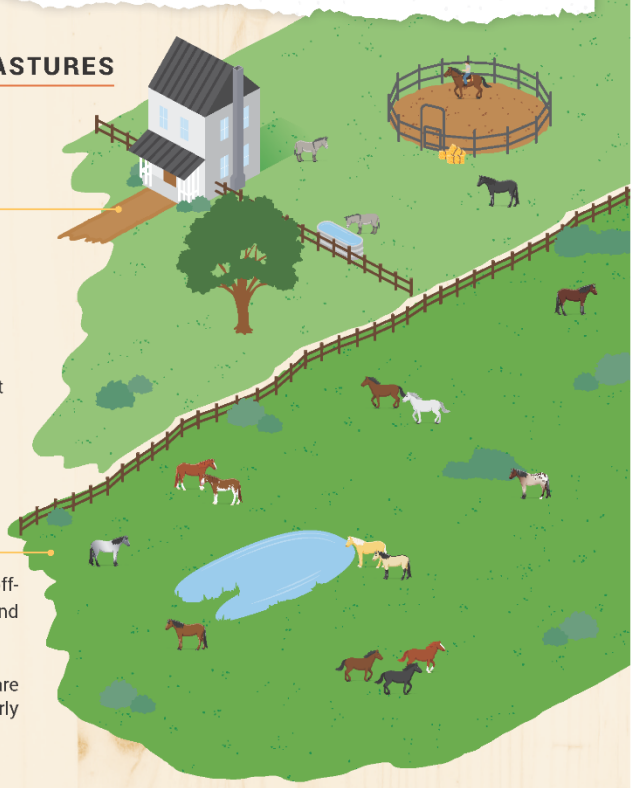
Find Good Homes & Provide Long-Term Care

For animals removed from the range, find good, private homes or provide long-term care on off-range pastures.

In an effort to find good homes for excess wild horses and burros, the BLM offers financial incentives to adopters of untrained animals. Visit ***BLM.gov/Adoption-Incentive*** to learn how to participate.

PRIVATE CARE AND OFF-RANGE PASTURES

There are two paths for excess wild horses and burros gathered from overpopulated herds:



1 Placement into Private Care

> 8,600 wild horses and burros were adopted and sold in Fiscal Year 2021

> 3,700 adopted through the Adoption Incentive Program

Rates of adoption and sales have historically not kept up with the growth of populations on the range. For wild horses not placed into a home through adoption or sale, the BLM provides life-time care on an off-range pasture.

2 Off-Range Pastures

Most unadopted and unsold wild horses roam off-range pastures, which provide open space and long-term care.

More than **50,000** wild horses and burros are cared for in off-range facilities, including nearly **40,000** wild horses located on off-range pastures.

The BLM is committed to working with Congress, state and local governments, partner organizations and the public to find practical solutions to achieve healthy and sustainable populations of wild horses and burros on healthy public lands.

U.S. Department of the Interior
Bureau of Land Management
Wild Horse and Burro Program

To learn about the variety of ways you can get involved, contact the BLM at ***WildHorse@BLM.gov*** or **866-468-7826,** or visit ***BLM.gov/WHB.***

Available online: https://www.blm.gov/sites/blm.gov/files/docs/2022-04/BLM_WHB_Infographic_FY22_FINAL.pdf

Appendix B: Toulmin handout

Be a Better Writer

English Composition.Org

The Toulmin Model of Argument - EnglishComposition.Org

The Toulmin Model of Argument: The Toulmin Model is a tool for analyzing and constructing arguments. It was created by British philosopher Stephen Toulmin and consists of the following six parts:

Claim: The argument being made, a statement that you want the audience to believe, accept, or act upon.

Grounds: The evidence that supports your claim.

Warrant: The logic or assumptions that connect your evidence to the claim. A statement of how your evidence logically and justifiably supports your claim. Warrants are often left unstated and commonly take one of the following six forms:

- **Warrant Based Generalization:** What is true of the sample is likely true of the whole.
- **Warrant Based on Analogy:** What is true of one situation is likely true of another, so long as they share key characteristics.
- **Warrant Based on Sign:** One thing indicates the presence or outcome of something else. For example, we can diagnose an illness or disease by its symptoms. People who own expensive things likely have a lot of money.
- **Warrant Based on Causality:** One thing causes another. For example, eating too much sugar is the cause of numerous health conditions.
- **Warrant Based on Authority:** An indication that something is true because an authority or group of authorities affirms it. For example, nearly all of the planet's esteemed scientists say that climate change is real.
- **Warrant Based on Principle:** An agreed-upon value or rule applied to a specific scenario. For example, *parents should love their children* is a widely-shared value. Backing (or refuting) that this value should apply to a specific parent in question might be the goal of an attorney in a criminal trial.
- Warrants are important because if your audience does not accept your warrant, they are not likely to accept your argument. Warrants can be questioned, which is why they often require backing.

Backing: Support for the warrant. It might take the form of a well-reasoned argument (or sub-argument) that directly strengthens the warrant. So, for example, let's say your argument depends on a warrant of causality. To strengthen your warrant, you might give additional evidence that shows that the causal relationship is not really just a simple correlation.

Rebuttal: Counterarguments to your claim. Situations where your claim does not hold true. This may also include your response to the counterargument.

Qualifier: The degree of certainty in your argument. Your argument may state that something is true 100 percent of the time, most of the time, or just some of the time. Words used to moderate the strength of your argument include *always*, *sometimes*, *usually*, *likely*, *loosely*, etc.

Your claim may also be qualified based on your analysis of the opposing arguments.

Example of the Toulmin Model Applied to an Argument

Let's break down the following argument:

Schools should ban soda from their campuses to protect student health.

Claim: Schools should ban soda from their campuses.

Grounds: Banning soda would protect student health.

Warrant 1: Poor diet leads to health problems in adolescents.

Warrant 2: Schools have a responsibility to protect student health.

Backing for Warrant 1: Studies show a high correlation between sugary drinks and obesity rates.

Backing for Warrant 2: Schools try to provide for the well-being of students in many other ways, such as campus security and counseling for behavioral and mental health.

Rebuttal: Banning soda from school campuses won't prevent students from drinking it at home.

Qualifier: Even though students would still have access to soda before and after school, banning soda from school campuses would reduce their overall consumption, which is an important contribution toward protecting their health and well-being.

Though argumentative analysis can never be reduced entirely to a formula, the Toulmin model, along with other models of persuasion, can increase your understanding of how arguments work (and don't work).

Let's try it out!

Appendix C: FeedXL presentation slides & access instructions

Teaching Equine Nutrition with FeedXL

FeedXL Horse Nutrition Calculator

NAEAA 2022

UNIVERSITY OF DELAWARE

Amy Biddle asbiddle@udel.edu
Alexa Johnson alexaj@udel.edu

Access to FeedXL **during NAEAA**: Coupon code valid for 1 year

1. Sign up here:
https://edu.my.feedxl.com/auth/newUser.fxl?country=us&accessPlan=premium&membershipLength=M&horseLimit=5&countryOverride=yes

2. Fill in the signup form. Checkout with coupon code **STUNAEAA22**. This code will set the Premium 5 horse monthly to $0. Enter your name and then click in the credit card field and you'll see a list of credit cards; please choose the first one "valid card" {this is simply a dummy card).

3. You'll receive an activation email, and make sure to use the "edu" server for your login. Sign in at **https://edu.my.feedxl.com**

4. Navigate to your My Account page and check that Auto-renew is ON.

5. When finished using FeedXL for the workshop, please go back to your My Account Switch Auto-renew to OFF and then your account will expire on the next billing date.

If you get an error please contact support@feedxl.com

Workshop Objectives:

Challenges of teaching equine nutrition to undergraduate students

Introduction to FeedXL: Demonstration/walk through the website features

How do I use FeedXL in my class?

How could you use FeedXL in your curricula? Participant brainstorm

ANFS 241: Equine Nutrition

Three credit, no lab

20-30 students

Equine Science Minors

Nutrition Minors (new)

ANFS Elective

Challenges of teaching **equine nutrition** to undergraduate students

Convenient tools

Evidence based vs ***Market*** based information

Huge selection and variation in feeds, forages, supplements

Variation in student prior experience in nutrition

Variation in student confidence in math

What are challenges to teaching equine nutrition in your setting?

FeedXL
Horse Nutrition Calculator

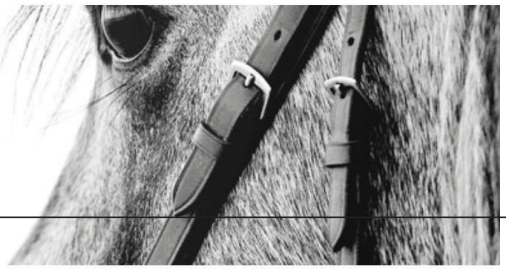
Equine nutrition calculator

Forage, feed, and supplement database
searchable, customizable

WHY DO WE SHOW UP FOR WORK EVERY DAY?
BECAUSE WE'RE ON A MISSION…

At FeedXL we're **dedicated to educating horse owners** so that they **understand nutrition** better and **can make informed feed choices.**

We cut through all the marketing bias and personal opinion and get to the facts.



Knowledge Hub
articles, interviews

Target audience = horse owners

FeedXL
Horse Nutrition Calculator

WE'RE REAL PEOPLE HERE. OUR DIVERSE BACKGROUNDS ALLOW US TO HELP YOU BETTER.

THE FOLKS BEHIND THE SCENES

Worldwide presence

Based in Australia

DR NERIDA RICHARDS PHD

Lead Nutritionist & Thinker-Upper of New Features & Marketing

BACKGROUND:

Bachelors Degree in Rural Science with First Class Honours and a PhD in equine nutrition. Almost 2 decades of hands-on experience as an Equine Nutritionist.

PUBLICATIONS:

Richards, N. (2003) Enhancing starch digestion in the equine small intestine. PhD Thesis, UNE.

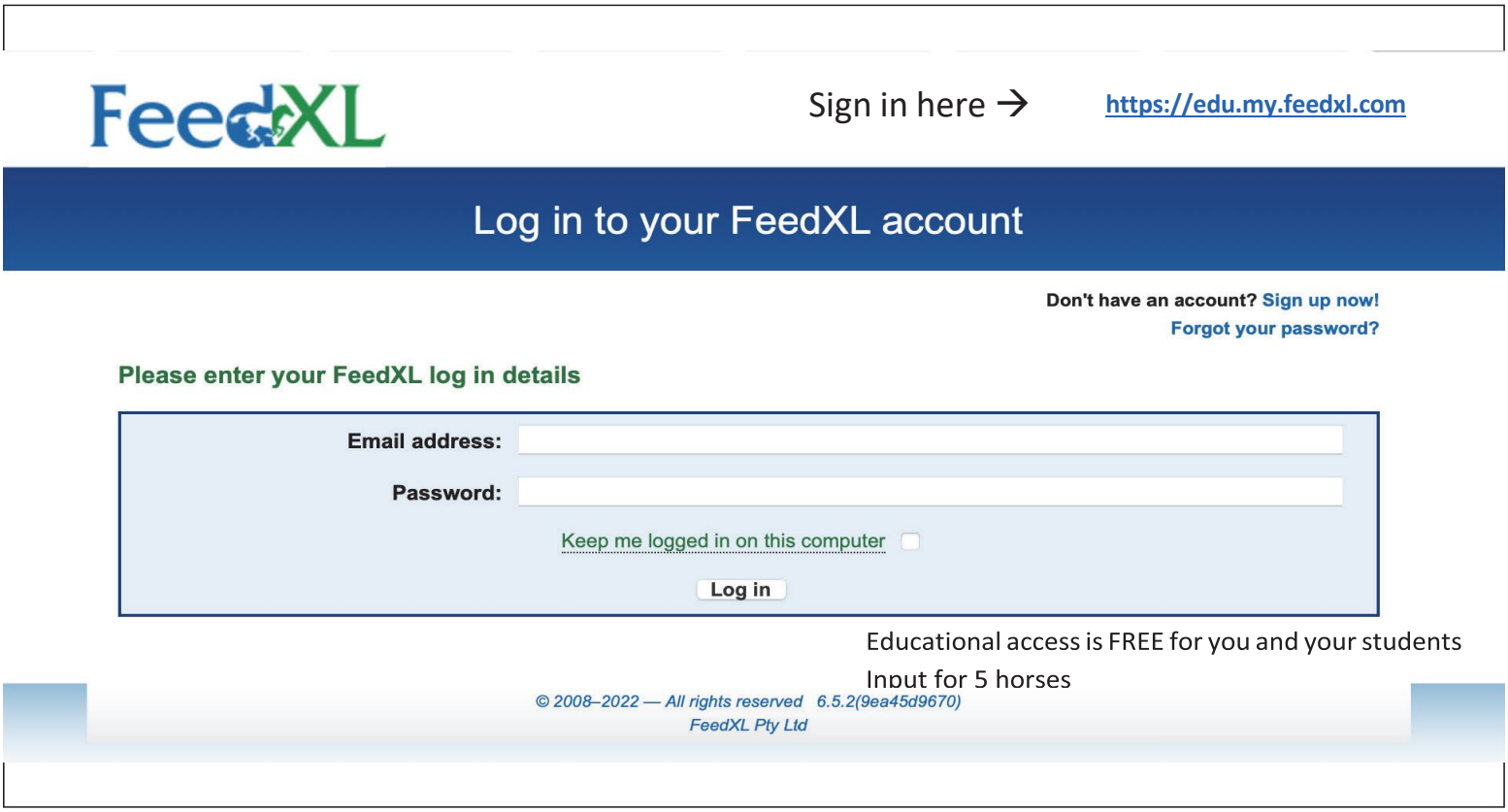
BEST THING ABOUT WORKING AT FEEDXL:

Hearing stories about how FeedXL has helped our members' horses and ponies! It is truly satisfying to know that it makes such a huge difference. Many horses have been saved from being put to sleep & more still have returned to competition when owners had been told they would never be ridden again. Getting nutrition right is pretty amazing!

FeedXL
Horse Nutrition Calculator

HOW IT WORKS | TESTIMONIALS | KNOWLEDGE HUB | PLANS & PRICING | CONTACT | LOG IN | SIGN UP

https://feedxl.com



How do I use FeedXL with my students?

Equine nutrition calculator:

Diet evaluation/ Design under normal circumstances

What happens when something changes?
workload, health status

How do I use FeedXL with my students?

https://edu.my.feedxl.com

Equine nutrition calculator:

Meet Caitlin1 20 yo Standardbred Mare1 light work

Getting free choice grass pasture1 OG hay1 salt block

Is she getting what she needs?
What would change with more work?

FeedXL Nutrition Makes a Difference

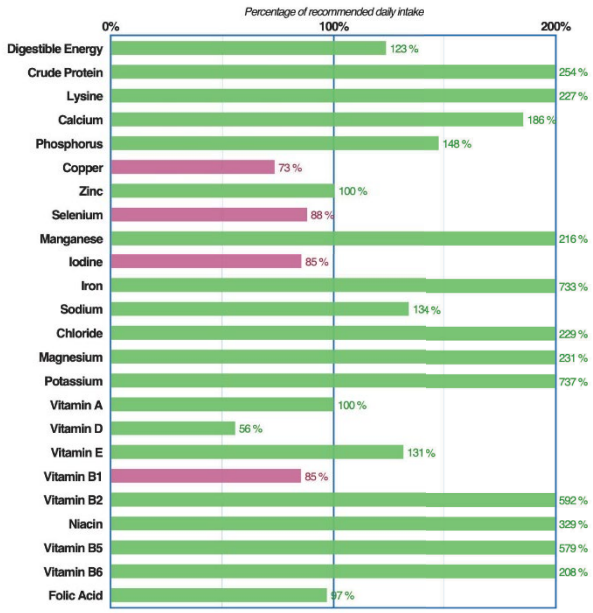
Caitlyn
Caitlyn's Diet (26-May-2022)
Diet Analysis Report
Friday, May 27 2022

Light work

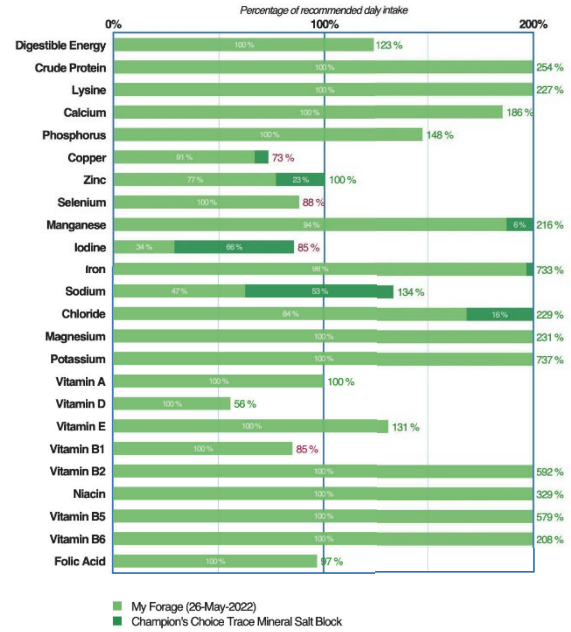
FeedXL Nutrition Makes a Difference

Caitlyn
Caitlyn's Diet (26-May-2022)
Diet Analysis Report
Friday, May 27 2022

Nutrient Graph



Advanced Nutrient Graph

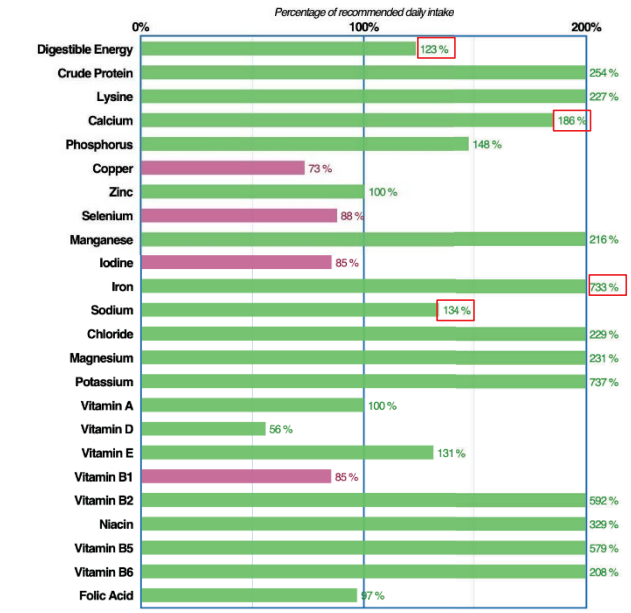


FeedXL Nutrition Makes a Difference

Caitlyn
Caitlyn's Diet (26-May-2022)
Diet Analysis Report
Friday, May 27 2022

Light work

Nutrient Graph

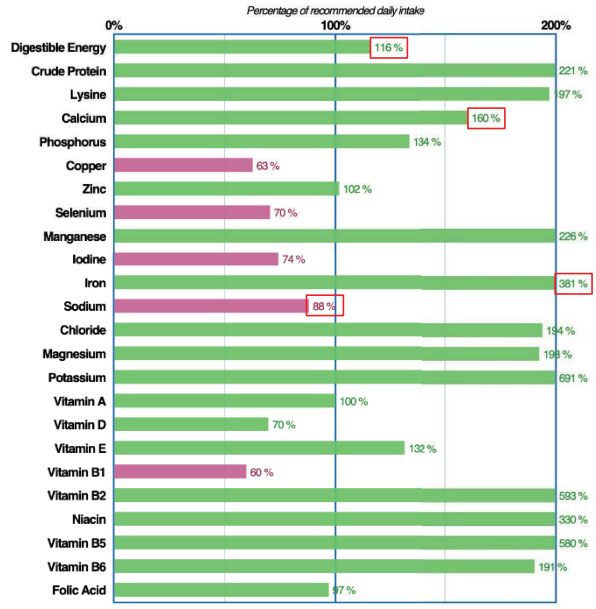


FeedXL Nutrition Makes a Difference

Caitlyn
Caitlyn's Diet (26-May-2022)
Diet Analysis Report
Friday, May 27 2022

Heavy work

Nutrient Graph



How do I use FeedXL with my students?

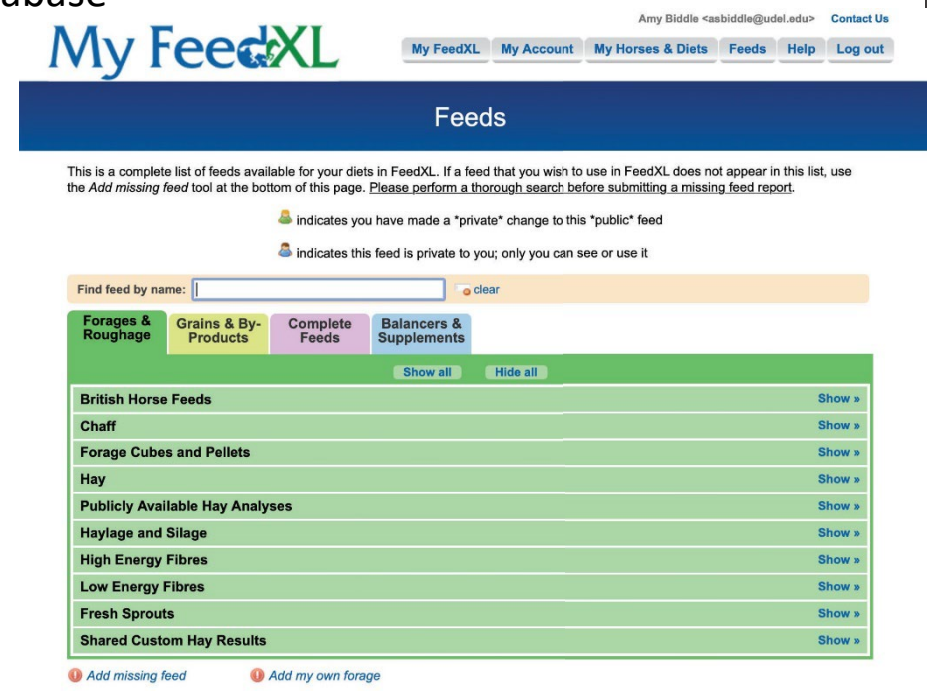
https://edu.my.feedxl.com

Forage, feed, and supplement database

searchable

customizable

Add your own forage data



Senior Feed Comparison

Blue Seal Sentinel Senior

Edit

Complete Feeds / Blue Seal
<none>

FEED DETAILS

Website:
https://blueseal.com/product/sentinel-senior-sr/

NUTRIENT INFORMATION, 90 % DRY MATTER — PER 1 kg

Legend: ✓ Data available — Contains none ? No data available

✓ Digestible Energy 1.41 MCal	✓ Magnesium 0.45 %	— Hyaluronic Acid 0 mg
✓ Crude Protein 14.5 %	✓ Potassium 0.95 %	— MSM 0 mg
✓ Lysine 0.65 %	✓ Vitamin A 5,000 IU	— Chondroitin Sulfate 0 mg
✓ Calcium 0.9 %	✓ Vitamin D 825 IU	— Glucosamine Hydroc... 0 mg
✓ Phosphorus 0.65 %	✓ Vitamin E 145 IU	— Glucosamine Sulphate 0 mg
✓ Copper 55 ppm	✓ Vitamin B1 7 mg	✓ Fat 5.5 %
✓ Zinc 165 ppm	✓ Vitamin B2 10 mg	✓ Crude Fibre 16 %
✓ Selenium 0.55 ppm	✓ Niacin 32 mg	✓ Ash 8.75 %
✓ Manganese 135 ppm	✓ Vitamin B5 18 mg	— Glucosamine 0 g
✓ Iodine 1.95 ppm	✓ Vitamin B6 6 mg	— Oxalate 0 mg
✓ Cobalt 2.2 ppm	✓ Folic Acid 1.3 mg	✓ Omega 3 3 g
✓ Iron 272 ppm	✓ Starch 14 %	✓ Omega 6 17 g
✓ Sodium 0.39 %	✓ Water Soluble Carbo... 6.5 %	✓ Biotin 0.45 mg
✓ Chloride 0.61 %	✓ Non-Structural Carbo... 20.5 %	

Triple Crown Senior

Edit

Complete Feeds / Triple Crown Nutrition Inc
<none>

FEED DETAILS

Website:
https://www.triplecrownfeed.com/products/senior/

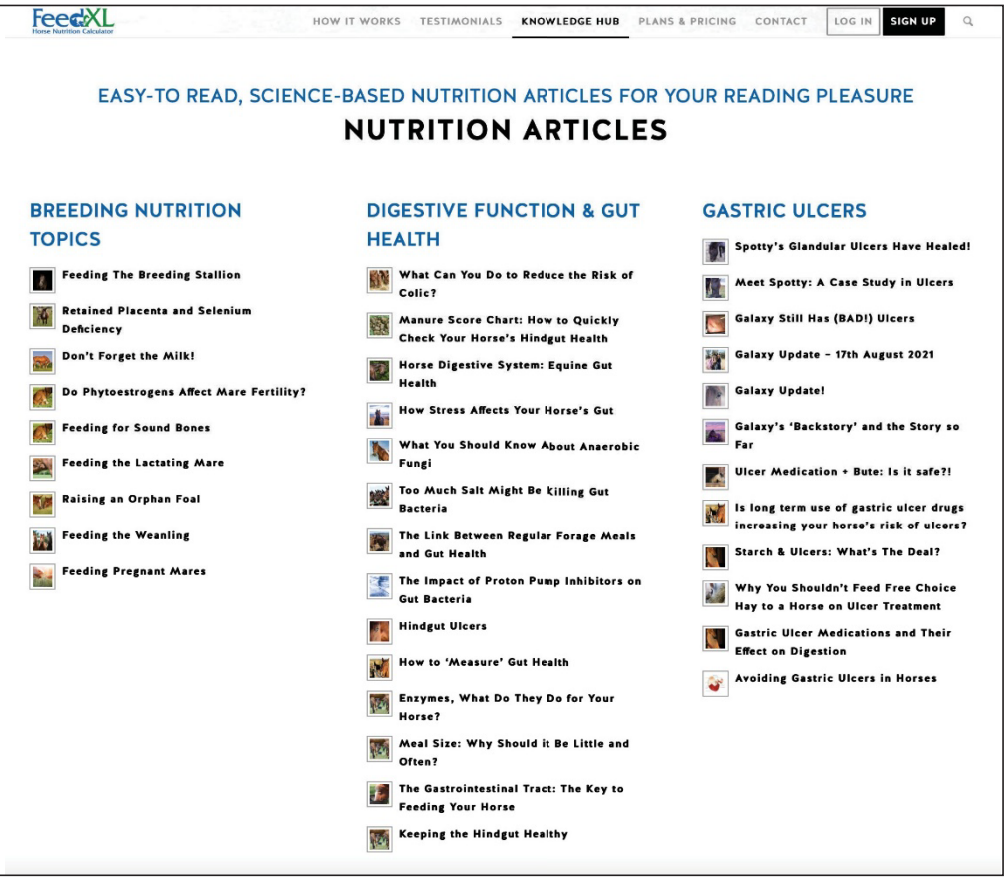
NUTRIENT INFORMATION, 90 % DRY MATTER — PER 1 kg

Legend: ✓ Data available — Contains none ? No data available

✓ Digestible Energy 3.41 MCal	✓ Magnesium 0.37 %	— Hyaluronic Acid 0 g
✓ Crude Protein 14 %	✓ Potassium 1.2 %	— MSM 0 g
✓ Lysine 0.8 %	✓ Vitamin A 13,228 IU	— Chondroitin Sulfate 0 g
✓ Calcium 1.15 %	✓ Vitamin D 2,205 IU	— Glucosamine Hydroc... 0 g
✓ Phosphorus 0.6 %	✓ Vitamin E 385.8 IU	— Glucosamine Sulphate 0 g
✓ Copper 50 ppm	✓ Vitamin B1 15.4 mg	✓ Fat 10 %
✓ Zinc 200 ppm	✓ Vitamin B2 5.51 mg	✓ Crude Fibre 17 %
✓ Selenium 0.75 ppm	✓ Niacin 143.3 mg	? Ash
✓ Manganese 100 ppm	✓ Vitamin B5 28.3 mg	— Glucosamine 0 g
✓ Iodine 2.09 mg	✓ Vitamin B6 11.3 mg	— Oxalate 0 g
✓ Cobalt 0.4 ppm	✓ Folic Acid 2.48 mg	✓ Omega 3 0.6 %
✓ Iron 175 ppm	✓ Starch 6.4 %	✓ Omega 6 3.5 %
✓ Sodium 0.57 %	✓ Water Soluble Carbo... 5.3 %	✓ Biotin 0.441 mg
✓ Chloride 1.02 %	✓ Non-Structural Carbo... 11.7 %	

Knowledge Hub articles, interviews

Food for discussion!



Knowledge Hub articles, interviews

Food for discussion!

DISEASE-RELATED TOPICS

- Allow grazing in the very early morning for horses prone to laminitis
- PSSM – how do the different forms affect how you should feed?
- What's new with PPID (formerly Cushing's)
- Teff Hay for Laminitic Horses
- Feeding Sick or Injured Horses
- Bighead
- Feeding Horses That Tie Up
- Feeding the Laminitic Horse

SPECIFIC SITUATIONS AND HORSE TYPES

- Feeding before and during competition
- Drought Feeding: Keeping Your Horse Healthy
- How to Feed a Horse That Won't Sweat
- What to Do When Your Horse Won't Eat
- What Should You Do if You Think Your Horse Has a Mycotoxin Problem?
- What to Consider Before Adding a Mycotoxin Binder to Your Horse's Diet
- How to Feed a Horse Confined to a Stable
- Feeding Horses with Worn Out Teeth
- Do You Have a Horse in Work That Goes Off Its Feed?
- Cold Weather and Calorie Requirements
- Feeding the 'Off-The-Track' Thoroughbred
- Feeding on the Move
- Feeding Senior Horses
- Feeding the Easy Keeper
- Feeding Horses in Winter
- Feeding for Weight Gain

FEEDING FOR WEIGHT LOSS & WEIGHT GAIN

- Using straw to achieve weight loss in horses
- How Much Should You Feed Your Horse in a Day?
- How Do You Know if Your Horse is Getting Enough Feed?

Knowledge Hub articles, interviews

Food for discussion!

FORAGE TOPICS

- Is Oaten Hay Bad for My Horse's Teeth?
- Straw as an Alternative Forage for Easy Keepers
- Nutritional & Non-nutritional Aspects of Forage
- Q&A: Grass and Legume Hays
- Q&A: Alfalfa and the Calcium to Phosphorus Ratio
- Is Forage All a Horse Needs?
- Setaria Grass and Bighead: What You Need to Know
- Teff Hay vs Rhodes Grass Hay
- Do High Sugar Forages Make Horses Fatter?
- Soft Manure in Horses on Fresh Lucerne/Alfalfa Hay? Try This!
- Teff Hay for Horses
- How Much Forage Your Horse Really Needs
- Cold Weather? Hay is Like Your Horse's Heater
- Mycotoxin Binders: Do They Work on Pasture Toxins?
- Feeding for the Season
- Spring & Autumn Pastures
- Identifying Pastures Part 2: Bighead Grasses
- Identifying Pastures: Part 1

SPOTLIGHT ON FEED INGREDIENTS

- Sugarbeet is more SUPER than I realised!
- Is Copra Meal a Good Feed For Horses?
- What is the Safest Form of Flaxseed – Whole, Ground, Heat Treated or Oil?
- Q&A: Original Grain or New Regimen?
- Psyllium Husks
- Are Soybean Hulls Safe For Horses?
- Grain Free Horse Feed: What Does it Actually Mean?
- How Long Should You Boil Barley or Corn?
- Benefits of Oats for Horses
- Chickpeas For Horses: Should They Be Cooked First?
- Herbs: Where Do They Fit in Your Horse's Diet?
- How to Choose a High Quality Horse Feed
- Garlic for Horses: Should You Feed It?
- Feeding Flaxseed
- Seaweed for Horses: Miracle Supplement or Massive Con?
- Grains for Horses: Cooked or Uncooked?
- Alfalfa (Lucerne) Hay: Friend or Foe?

SPECIFIC NUTRIENTS

- Why isn't Sulfur included in FeedXL?
- Vitamin B12 – Do horses need it in their diet?
- What are the Symptoms of Mineral Deficiency in Horses?
- Magnesium Oxide for Horses
- Iron: Is There a Link to Laminitis?
- Iron for Horses: Could Forage Be Enough?
- What You Should Know About Phosphorus and Phytate
- Vitamin C for Horses?
- Diet Lacking in Vitamin E?
- Vitamin B6 for Horses
- What Is an Organic Mineral?
- Oil for Horses: Good or Bad?
- Does Your Horse Need Electrolytes?
- The Importance of Fibre for Horses
- Protein: Can You Feed Too Much?
- Which Form of Magnesium is Best?
- Magnesium for Horses: Which Form is Best?
- Understanding Protein Quality in Horse Feed
- Omega 3 for Horses: What, Why, How?
- Biotin: Should You Supplement?

Knowledge Hub
articles,
interviews

Food for discussion!

Your turn.

How could you use FeedXL with your students?
Would these tools add to your current course content?
Do these tools inspire new course content for you?

Equine nutrition calculator

Forage, feed, and supplement database

Knowledge Hub

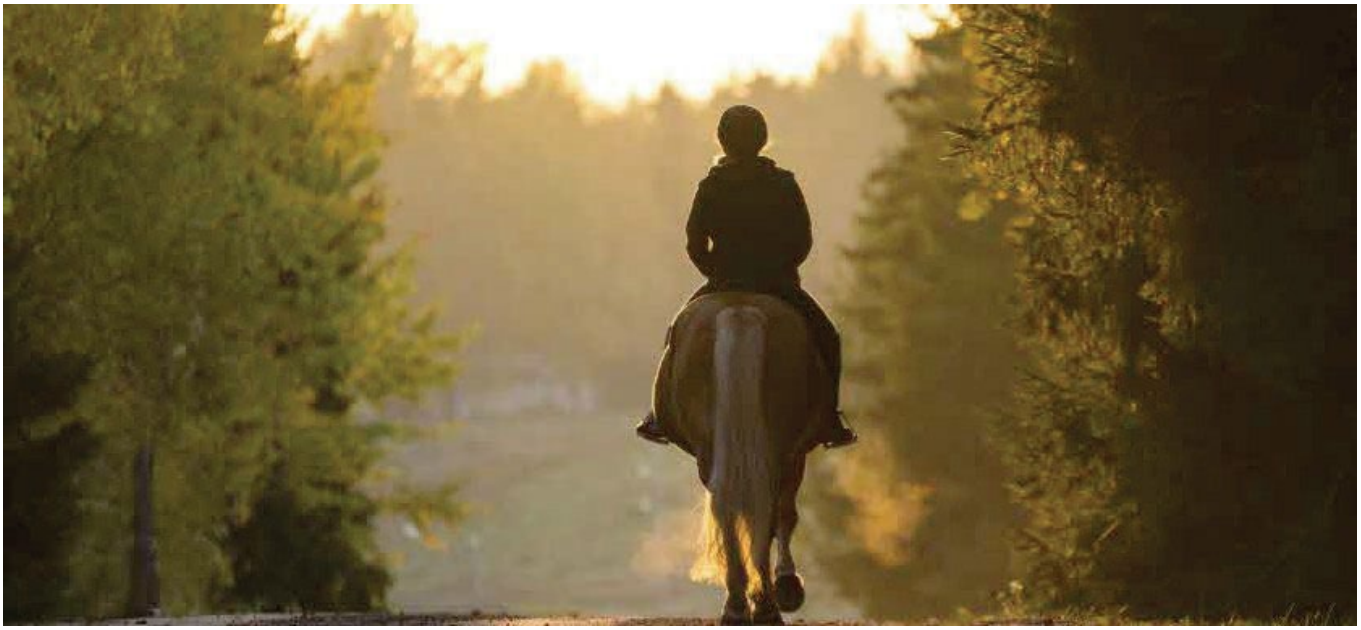
Access to FeedXL after NAEAA: EASY Peasy!

FeedXL Educational Access is offered **free of charge** for teaching purposes.

https://feedxl.com/education/

- ☐ Arkansas State University
- ☐ Auburn University
- ☐ Box Hill Institute
- ☐ Enniskillen Campus Ireland
- ☐ Marcus Oldham College
- ☐ Massey University
- ☐ Melbourne Polytechnic
- ☐ Murdoch University
- ☐ North Carolina State University
- ☐ TAFE NSW Art
- ☐ TAFE NSW Goulburn
- ☐ TAFE NSW Kurri Kurri
- ☐ TAFE NSW Richmond
- ☐ Tennessee University
- ☐ University of Melbourne
- ☐ University of Queensland
- ☐ University of Sydney
- ☐ University of Southern Queensland
- ☐ Writtle University College
- ☐ Yanco Agricultural High School
- ☐ Other (please specify)

Any Questions?



Appendix D: Indicators of Excellence document draft

National Association of Equine Affiliated Academics (NAEAA)

Indicators of Excellence in Equine Undergraduate Academics

This template document is designed for use in internal self-study and/or external peer review for undergraduate offerings affiliated with equine studies. The contents are centered around the five constructs of Standards of Excellence in Equine Undergraduate Education identified by NAEAA: Equine Student Knowledge and Skills; Critical Thinking and Communication; Trajectory of Graduates; Program Reputation; Program Sustainability.

The template focuses on data used as indicators of commitment to each of the standards. There are prescribed areas for data reporting and reflection along with ample space for programs to add in characteristics and data that are unique to their offerings. It is not expected that every category, section, or description within each of the five constructs will apply to every institution. Still, a commitment to each of the Standards is expected along with appropriate assessment measures, results, and reflections.

Academic Programs that submit for external review using this process in combination with a NAEAA approved peer reviewer, have the opportunity to earn NAEAA Certification for 'Commitment to NAEAA Standards of Excellence'.

Last Updated: May 30th, 2022

Contents

Introduction/overview

The Value of a Program Review

NOTE – this section is in progress. *The concept of academic program review has been present in US Higher Education since the early 1970's when a movement began to 'make data-driven decisions regarding [academic program] effectiveness and sustainability, and report to stakeholders" (McGowan; Administrative Issues Journal: Connecting Education, Practice, and Research, Summer 2019 Vol. 9, No. 1: 53-67. DOI: 10.5929/9.1.1) A few additional excerpts from the referenced study include: "It is clear that accreditation and external pressures are forcing higher education to respond to calls for transparent and effective decision making…"; This study helps make clear that outcomes assessment, and its emphasis on data collection for decision-making purposes, has turned the tide from a best practice to an expected practice.*

History of the NAEAA Standards of Excellence

In 2010, members of the National Association of Equine Affiliated Academics engaged in a series of working sessions to develop an initial list of 'Indicators of Excellence (IOE)' for undergraduate programs of study in the equine discipline. That initial list was then used in a 2011 survey of members to gauge the level of importance of each indicator along with the ease in which respondents felt data could be gathered and used to assess both student and program success in each area. Through ongoing discussion and collaboration, five Standards of Excellence constructs were identified for building and evaluating programmatic excellence: Equine Student Knowledge and Skills; Critical Thinking and Communication; Trajectory of Graduates; Program Reputation; and Program Sustainability. In the self-study and/or external review process, each construct is evaluated by gathering, assessing, and reflecting on data that serves as Indicators of Excellence or IOEs. Additional discussions, workshops, input from working groups, and limited site application, resulted in an initial set of materials for self-study and/or academic review. More than ten years after the initial discussions, the materials have again been reviewed with updates geared towards streamlining the process for wider application and placing it into a guidebook format. The following individuals have been instrumental in the review and update: Dr. Karin Bump, Dr. Janice Holland, Dr. Lynn Taylor. This guidebook is now ready for member input for a renewed launch in 2022-2023.

Equine Program Definition

For purposes of this document 'equine program' refers to any undergraduate academic program affiliated with equine studies.

How to use this Document

This template document is designed to provide a voluntary self-study and/or external peer review guidebook for undergraduate equine programs. As such, the document is broad-based to accommodate the diversity of undergraduate program offerings within the equine discipline, while staying focused on the five constructs of Standards of Excellence in Equine Undergraduate Education identified by NAEAA: Equine Student Knowledge and Skills; Critical Thinking and Communication; Trajectory of Graduates; Program Reputation; Program Sustainability.

The document begins with an overall look at the institution and program with a focus on gathering information and materials that are Indicators of Excellence (IOE's) for the constructs of Program Sustainability and Program Reputation (Section 1). Moving into Section II, the materials delve deeper into the curriculum including graduate trajectory. This is the section that gathers IOE materials for Equine Student Knowledge and Skills; Critical Thinking and Communication; and Trajectory of Graduates. Evaluation areas are identified for each IOE along with space to individualize evaluation areas according to the focus of each program. FAQs are included at the start of each section and include suggestions and recommendations on how to approach the section as well as where to look for key data.

In working through the document, there may be an IOE section or category of information that does not apply to your program or your institution. If/when that happens, the self-study author(s) should note this with an explanation as to why this is the case. There may also be places for which data has not been gathered. If/when that happens, this should again be noted along with an explanation as to why this is the case and what plans are in place to have that information in the next 1-3 years.

There is no one best approach to beginning this work. Yet, starting is key! Some programs begin by having a single person (usually a department or program chair) write a working draft document and then begin review and discussions with members of the program team. Some spread out the work, combine sections to a draft document and then begin review and discussions. Another approach is to begin with department discussions on each section capturing key thoughts and information that then form an initial draft. Again, the important part is to begin. Work on a self-study is typically done within 6months to 1year. However, if a program has had a lapse of time between self-studies and/or does not already have a student learning outcomes assessment plan, it can take up to two years.

When completed, the self-study provides a wealth of information beneficial for curriculum improvement, student recruitment, and student retention. It also serves as a historical document capturing key events that can otherwise be lost. The work of a self-study is most meaningful

when this is purposely imbedded and reinforced at the front of the work – they 'why' of a self-study placed on the benefits rather than just the process.

Guidelines for External Reviewer Selection and Compensation

While a single external reviewer can be used, a more common and holistic model is to select 2-3 individuals to work as a review team. One of the team members will take - or be assigned - the Lead role which includes completion of the written evaluation that is submitted to the institution. Submission normally occurs 1-2 months after completion of the site visit.

Reviewers should be recognized experts in the discipline or professional field of the program under review. Where there are specific subsets within the program (example, a BS in Animal Science that also has a Therapeutic Riding curriculum), care should be taken to have someone on the team with experience in the subset areas. Alternatively, a program can request a review of the primary program only. The focus of the review should be made clear at the time of reviewer selection, and then again, the day the site visit begins.

Compensation rates for external reviewers varies among institutions yet a general range is between $200 and $500 (for a 1 ½ to 2-day review), with additional compensation for the Lead reviewer who is charged with writing the formal evaluation. This rate assumes that all travel, lodging, and meals are covered by the institution that hires the reviewer.

NAEAA can assist in identifying professionals that would be well suited to the discipline or professional field that will be reviewed. Please contact Dr. Karin Bump if assistance is desired: Dr.Kbump@gmail.com

Guidelines for Reviewers

Taking on a program review is a significant commitment and one that should not be taken lightly. Prior to acceptance, consideration should be given to the type of program to be reviewed, skills and knowledge with the review process, and any areas that could pose conflicts of interest.

Prior to arrival on campus, the reviewer should have been provided with a current self-study document for the program. The document should arrive no later than one month prior to the site visit to ensure adequate time for review. The agenda for the site visit is normally set by the institution and arrives closer to the site visit dates. If, upon reviewing the agenda, there are specific areas of importance to the review that are not included, this should be raised prior to the visit to see if arrangements can be made to adjust the schedule accordingly.

Reviewers are to bring an open and informed approach to the assessment of the program, working to mitigate bias and any areas that would be self-serving. The team should provide critical insight and response relative to the program self-study with careful attention to the direction of the program and its positioning relative to trends and emerging opportunities in the discipline and industry. Questions raised by the reviewers should focus on information directly related to the review process to ensure avoidance of time spent on areas that relate solely to a reviewer's interests or curiosities.

At the conclusion of the site review, a written report is prepared reflecting on the material provided within the self-study and important themes that occurred during site visit meetings. The final report should include all sections of the 'reviewer commendations and recommendations' section and then a final summary piece that highlights overall Commendations and Recommendations. Often these are areas that emerged as themes throughout each section of the report. Recommendations should be listed in order of importance including the use of high; moderate; and lower to signify level of urgency in addressing. For example, a site review that identifies any areas of danger to individuals and animals would be in the high category along with other recommendations that need to be addressed either immediately or within the next 6 months. The Lead for the review team is responsible for writing the final document, while each reviewer is responsible for contributing to the document and providing a careful review/edit of the draft prior to submission.

Professionalism in terms of confidentiality is part of the review process. There may be times during the site visit that an individual asks that their direct comments not be included in the report. This does not mean that the message cannot be included – and if it is important, it needs to be included. Still, care should be taken on when and how that information appears in the report. Confidentiality also refers to the members of the review team. While sharing that you were on a review team for X program is fine, sharing any ***specific*** results and/or findings is rarely acceptable outside the intended audience.

FAQs

How often should a self-study be completed?
It is recommended that programs complete a formal self-study every 5-7 years with an interim assessment at the half-way mark. Self-studies are also recommended at any point that a program is considering change in curriculum and/or seeking funds for significant investment into facilities and/or infrastructure.

How often should an external review be completed?
External reviews are optimally placed after completion of each formal self-study.

How does a program request review for consideration of earning NAEAA Certification?
This section is in progress.

What if a program already has self-study and/or student learning outcome assessment document(s) – does this template have to be followed?
Yes and No. Programs requesting review for consideration of Certification do have to address all applicable areas within the Indicators of Excellence Guidebook. However, existing program documents can be included/ modified/ referred to as appropriate to simplify the work.

Where can I get help?

NAEAA will be offering professional development opportunities for those new to the program review process and/or wanting to become a program reviewer for NAEAA Certification. Please email Dr.Kbump@gmail.com if you are interested in this opportunity.

Section I – Institution and Equine Program Overview: Program Reputation and Program Sustainability IOE's

This section is designed to collect key information that provides an overview description of the type of institution, nature of program, and approach to student and learning. Material in Section 1 pertains to the IOE's of ***Program Reputation*** *and* ***Program Sustainability.***

Section I.A General College and Program Information

FAQ: Why am I collecting this information? General information regarding the college is important to gather and share in order to establish an understanding of the nature of the institution and how/where the equine program fits. From an external review standpoint, this information also provides context for the program information that will follow.

FAQ: How does this apply to the IOE's? Beyond establishing a common base of understanding, the information is helpful in considering the constructs of Program Reputation and Program Sustainability.

FAQ: Where am I likely to find this information? This information is typically housed in the admission, registrar, and or institutional research offices

FAQ: What if I can't find this information? If there are places where information is unknown/not gathered, please note this in the section along with plans to ensure that the information will be gathered and available within the next two years.

A. College/University Mission**.** In the space below, please provide the College/University's Mission Statement. Vision Statement and link to the College/ University Strategic Plan can also be included.

B. Categorization of College/University**.** Please highlight each category option that applies to your institution.

Category	Options	Options	Options	Options
Designation	College	University		
Profit Status	Profit	Non-profit		
Public or Private	Public	Private		
Specialty/Academic Focus	Broad-based/Non-specialty	Liberal Arts	Vocational-technical & Career College	Community

	Polytechnic Institute			
Specialty Focus	Single-Sex	Religious Affiliation	Specialized Mission	N/A
Degree Available	2-year degree	4-year degree	Combination (graduate/undergraduate)	Certification
Undergraduate student body	1-2,000	2,000-3,000	3,000-4,000	4,000-5,000
Total of FT and PT Students	5,000-10,000	10,000-20,000	20,000-40,000	>40,000

C. Equine Program Overview

- *Program Mission/Goals/Learning Outcomes*. Please provide each (as applicable) and describe how these link/support the College/University Mission.

- *Brief Program History*. Include a brief history of the academic program at your institution.

- *Equine Related Degrees/Academic Programs*. Include the title and catalog description of the majors, minors, and concentrations, and/or certificates available within the program.

  Majors

  Concentrations/Specialization

  Minors

  Certificate

- *Credit breakout for Equine Related Degrees/Academic Programs*. For each program identified above , list the title in the far-left column and then the credits for each area in the spaces that follow.

Program Title	Science-Based Credits	Horsemanship, Training, Equitation-Based Credits	Management-Based Credits	Business-Based Credits	Equine-Assisted/ Therapeutic Credits	General Education/ Core Curriculum Credits	Open Elective Credits	Other credits (specify area)	**Total required credits**

Additional Educational Opportunities.

Non-Classroom Curriculum

Activity	**Opportunity Offered (Yes/No)**	**Activity Assessed (Yes/No)**	**% of students completing annually**
Undergraduate Research			
Internship/Co-Op[1]			
Independent Study[2]			
Community Service Project			
Undergraduate Presentations			
Student Portfolio			
Therapeutic/Equine Assisted			
Volunteer work in equine area			
Study Abroad			
Other			

[1]Internship/Co-Op – applied experiential educational opportunity.
[2]Independent Study - an academic course that is non-traditionally offered and conducted by an instructor.

Experiential Education

Activity	Opportunity Offered (Yes/No)	Activity (Yes/No)	% of students involved annually
Riding Teams			
Riding Clubs			
Hosting of Events (shows, clinics, seminars)			
Judging Teams			
Other:			
Other:			

D. Tuition and Enrollment:

- Tuition:
- Room and Board:
- Additional fees applied to equine courses (if applicable):
- Average 'discount' (grants, scholarships, awards) resulting in typical 'net tuition':
- Average debt load of graduating students (overall):
- Average debt load of graduating students (equine):
- Total number of students applying to the equine program for each of the past three years:

- % equine program acceptance rate for past three years:
- % of equine program enrollment rate (acceptance to enrollment past drop/add period) for past three years:
- % equine program persistence to year 2 enrollment:
- Describe any internal and/or external factors impacting on equine program enrollment patterns for the past three years:

E. Assessment and Accreditation Background:

- Accrediting association for Institution:
- Date of last Institutional accreditation:
- Any additional accreditations related to the equine program:
- Date of last external equine program review:
- Recommendations and program changes since last equine program review:
- Please provide HEGIS (Higher Education General Information System) codes for registered degrees/majors:

F. Budget and Finance

- Describe the way in which budgeting for the academic program is carried out and managed along with related figures
- Describe the way in which budgeting for the academic program is carried out and managed along with related figures
- If there is an equine program fee applied annually or by semester, please describe each (with figures) and how the funds are collected and allocated
- If there are any course fees applied to equine program fees applied annually or by semester, please describe each (with figures) and how the funds are collected and allocated

Equestrian Facilities

- Describe the way in which budgeting for the equestrian facilities is carried out and managed along with related figures.
- Are facilities considered cost centers or revenue centers? Please answer and explain.
- Has a cost analysis been conducted on the equestrian centers? If yes, please describe and provide applicable figures.
- How is the equestrian facility staffed (FT, PT, student workers (paid), student workers (work study), other – please describe including figures as applicable.

Riding Teams and/or Equine Clubs

- Describe the way in which budgeting for teams and clubs is carried out and managed along with related figures.
- Are teams organized under the equine program or the athletic program? Please answer and explain.

Horse Herd

- Describe the way in which budgeting for horse herds is carried out and managed along with related figures.

Finance overview comments:

- What are the strengths and challenges associated with current budget and finance process and figures?

Section 1. A. SWOT Analysis Using the information provided in this section; identify the key strengths, weaknesses, opportunities and threats that emerge through a review of general institution and equine program information. Keep in mind that this section pertains to the IOE's of **Program Reputation** and **Program Sustainability**

Strengths	**Weaknesses**
Opportunities	**Threats**

Reviewer Commendations and Recommendations:

Notes to Reviewers:

- Consider the following areas as you develop commendations and recommendations related to this section:
- Size and nature of equine program in comparison to overall institution
- Credit distribution within equine program in comparison to program description and mission
- Enrollment patterns, cost of tuition, and debt load
- Financial planning and budgeting, along with involvement of equine program members/transparency across the department.
- Keep in mind that this section pertains to **Program Reputation** and **Program Sustainability** IOE's.

Section 1. B Equine Faculty Profile

FAQ: Why am I gathering this information: Providing a profile of the faculty teaching within the equine program establishes an understanding of the background and experiences of those delivering and assessing the teaching and learning outcome environment. From an external review standpoint, this information also provides context for the academic curriculum and learning outcomes information that will follow.

FAQ: Where am I likely to find this information? This information is likely housed with the program area department and/or the office of academic affairs. It is also material that can be provided directly by the faculty within the program.

FAQ: What if I can't find this information? If there are places where information is unknown/not gathered, please note this in the section along with plans to ensure that the information will be gathered and available within the next two years.

A. Equine Program Faculty Numbers for Past 3 years

- Total number of FT faculty dedicated to equine program
- Total number of FT faculty teaching within program but dedicated to a different program
- Total number of PT faculty teaching
- FT faculty to student ratio for equine program:
- FT faculty to student ratio of institution:
- Describe equine program faculty recruitment and retention over the past 5 years:

B. Program Faculty Demographics. List in order of rank: Full-time Faculty (Professors, Associate Professors, Assistant Professors, Instructors), Part-time Faculty, and Adjunct Faculty that have taught in the past three years.

Name	Rank/Tier	Hire Year	Degree(s) earned	Primary field(s) of study	University/Universities where degrees(s) earned	Courses typically taught

C. Evidence of Training and Experience. If a faculty member is teaching outside their primary field(s) of study OR is teaching without a terminal degree (professionally qualified rather than academically qualified) please provide additional evidence of qualifications:

Evidence of Faculty Training and Experience		
Faculty Member's Name	**Training and Experience**	

D. Evidence of Teaching Effectiveness, Scholarship, and Service. Provide information that can be helpful in considering effectiveness of Full time and Key Part Time faculty members teaching in the program. It is anticipated that this information can come from annual faculty reports/reviews .

Faculty Member	**Teaching Effectiveness** Frequency of course evaluations	**Date of last peer review**	**Professional Scholarship** Highlights from last 3 years	**Service to College** Key roles	**Active professional connections/service to the areas within their teaching load.**	**Key strengths and areas for improvement from most recent peer reviews (at least 2)**

E. Workloads of Faculty in the Program. Summarize the workloads of each Faculty member in the program by completing the table below.

	Workloads of Program Faculty						
Faculty member	**Annual teaching load – in # of courses**	**Annual teaching load – in # of credits/units**	**Annual teaching load – in # of total students**	**Annual teaching load – in # of contact /teaching hours**	**Average # of advisees per year**	**# of committee/ service work hours per year**	**Other Required Duties**

F. Other key attributes:

- Professional Development – describe the funds available for professional development along with the process to receive those funds.
- Peer Reviews – describe the frequency and process of peer reviews along with how peer reviews are used for faculty development
- Teaching Effectiveness – describe the process used to assess and ensure effective teaching.
- Comparable programs - Identify three equine programs at peer institutions that you feel are comparable to your offerings.

Section 1.B. SWOT Analysis Using the information provided in this section; identify the key strengths, weaknesses, opportunities and threats that emerge through a review of general program and faculty information. Keep in mind that this section pertains to the IOE's of **Program Reputation** and **Program Sustainability**

Strengths	**Weaknesses**
Opportunities	**Threats**

Reviewer Commendations and Recommendations:

Note to Reviewers - Consider the following as you consider commendations and recommendations related to this section:

- To what extent does it appear that faculty have appropriate academic preparation, professional training, and experience to provide teaching and learning instruction in their typical course load?
- To what extent is it apparent that faculty remain current in their discipline?
- To what extent is there evidence that the faculty are directly connected to the industries within which graduates of the program would be employed?
- To what extent does it seem that faculty workload is comparable to other institution's equine programs as well as equitable across this institution?
- Is the data provided on teaching effectiveness appropriate to ensuring a regular review, as well as demonstrating commitment to continual improvement of the program?
- Does it appear that there is an appropriate mix of academically and professionally qualified faculty?
- Is there evidence that the institution appropriately supports faculty development activities that provide a benefit to the program?
- Keep in mind that this section pertains to the IOE's of **Program Reputation** and **Program Sustainability**

Section 1. C. Student Profile

FAQ: Why am I collecting this information? General information regarding student profile is important to gather and share in order to establish an understanding of students attending the institution overall, as well as within the equine program. From an external review standpoint, this information also provides context for the teaching and learning outcomes assessment information that will follow.

FAQ: How does this apply to the IOE's? Beyond establishing a common base of understanding, the information is helpful in considering the constructs of Program Reputation and Program Sustainability.

FAQ: Where am I likely to find this information? This information is typically housed in the admission and/or registrar offices.

FAQ: What if I can't find this information? If there are places where information is unknown/not gathered, please note this in the section along with plans to ensure that the information will be gathered and available within the next two years.

A. Admission Requirements – in the space below, please provide admission requirements (GPA, Standardized Scores, etc.) for the institution followed by any specific admission requirements for the equine program:

B. GPA Demographics – using the table below, please provide the average GPA of overall incoming students, and then average GPA of incoming students to the equine program.

Average High School GPAs of First Year Students		
	Overall incoming student GPA	**Incoming equine student GPA**
Current Year		
One year prior		
Two years prior		
Three years prior		
Four years prior		

C. Student Profile Characteristics:

Using demographic profile information collected by your institution, provide the age, gender, race and ethnicity characteristics of the entering classes for the past three years.

- Entering students (institution)
- Entering students (equine program)

D. Program Enrollment Profile and Graduation Rates: Using the table below, please provide the total number of equine program students in each year for the past five years.

Year	Total Number 1st yr. students	Total Number 2nd yr. students	Total Number 3rd yr. students	Total Number 4th yr. students	Total Number 5th yr. students	Total Number Graduating
Current Year						
One year prior						
Two years prior						
Three years prior						
Four years prior						

E. Diversity within the Academic Program –

- Please use this space to describe diversity in your equine program using language and metrics that align with your institutions DEI policies and practices.
- In what ways is the description of diversity in your program, similar/different than diversity in the full undergraduate body at your institution?
- In the next year, are you planning on instituting any intentional efforts to broaden efforts to purposely recruit a more diverse student body?

F. Incoming Student Equine Experiences:

In the space below, describe the prior equine experience of incoming students to your program. Include any changes over the past five years. Please focus on prior skills and knowledge, understanding of the equine industry, preparation to be successful in the program. Where applicable, include how this knowledge was assessed, i.e., was it a survey, essay, skills test upon entering, etc.

Section 1.C. SWOT Analysis – Student Profile: Using the information provided in this section; identify the key strengths, weaknesses, opportunities and threats that emerge through a review of student profile information. Keep in mind that this section pertains to **Program Reputation** and **Program Sustainability** IOE's.

Strengths	**Weaknesses**
Opportunities	**Threats**

Reviewer Commendations and Recommendations:

Notes to reviewers - Consider the following areas as you offer commendations and recommendations related to this section:

- In what ways does the equine program student profile compare/contrast to overall student profile?
- In what ways does the equine program student profile compare/contrast to other equine programs?
- In what ways does the equine program student profile compare/contrast to the equine industry?
- In what ways does the size and diversity of the program align with institutional goals and commitments?
- To what extent does it appear that the equine program student profile is a good match for the goals and approach of the equine program offerings? This includes consideration of retention and persistence to graduation.
- Keep in mind that this section pertains to the **Program Reputation** and **Program Sustainability** IOE's.

Section II. Equine Knowledge and Skills; Critical Thinking and Communication; and Trajectory of Graduates

Section II primarily pertains to the IOEs of: **Equine Knowledge and Skills**; **Critical Thinking and Communication**; and **Trajectory of Graduates.** For these IOEs, the extent to which each is successfully addressed is based on benchmarks, learning outcome goals, assessment measures, and learning outcome results. While the IOEs areas are pre-determined by NAEAA, the leaning outcome benchmarks, goals and methods of assessment are determined by each institution.

Example – IOE: **Equine Knowledge and Skills**

Step 1: Identify the Learning Outcome Goal (LOG) in measurable terms making it possible to provide evidence it has been learned/reinforced/mastered.

- Examples of LOG:
  - ✓ get a passing grade (65% or higher) on the Horse Care Skills assessment rubric
  - ✓ get an average grade (75% or higher) Horse Care Skills assessment rubric
  - ✓ get a proficient grade (80 or 85%) Horse Care Skills assessment rubric
  - ✓ get a perfect score (100% - not often used but can be) Horse Care Skills assessment rubric

Step 2: Identify a Benchmark percentage for the expectation of students that will be able to complete/master the skill/information that will be assessed in the LOG.

- Example Benchmark - 80% of the students will be able to meet the Learning Outcome Goal for the Horse Care Skills assessment rubric

Step 3: For each LO, indicate the method/tool and location used for assessing whether the LOG was achieved. Also include the frequency with which this assessment occurs per student: one time, repeated in several courses (identify which), annual (identify how), etc. Where applicable, examples of assessment rubrics should be supplied in an Appendix.

- EXAMPLE Method of assessment: Horse Care Skills assessment rubric used in two required courses: Introduction To Equine Health (EQ110) in Fall Term Freshman Year, Equine Disease Management (EQ430) in Fall Term Senior Year.

Step 4: Report the results of the assessment.

- EXAMPLE result: In the Fall of 2022, the benchmark goal was met with 80% of students (*the benchmark*) earning an average grade or higher (*the LOG*) on the Horse Care Skills assessment rubric administered in EQ110; 90% of students in EQ 430 earned an average grade or higher. Assessment Rubric is provided in the Appendix.

Step 5: If a Learning Outcome Goal is not met, identify the specific plan for improvement in future courses as well as any remedial work for students whose assessment lands below the defined goal.

- EXAMPLE **result**: In the Fall of 2022, the benchmark goal was not met as only 70% of students (*the benchmark*) earning an average grade or higher (*the LOG*) on the Horse Care Skills assessment rubric. Assessment Rubric is provided in the Appendix.

- EXAMPLE **action**: Supplemental workshops were held for students falling below the LOG; Faculty reflected on results with discussion on how to adjust teaching and learning in order to successfully meet Benchmark and LOG in future years.

Section II. A: IOE: Equine Knowledge and Skills

FAQ: Why am I collecting this information? Measuring and reporting on areas within the IOE of Equine Skills and Knowledge provides a look at the ways in which students are meeting the goals and objectives of the curriculum. The common set of areas provides context that is comparable across similar institutions and programs committed to excellence in their equine undergraduate offerings. Unique areas identified by the equine program provide a look at other learning features important to the program.

FAQ: Where am I likely to find this information? This information is typically provided by the equine department chair and faculty.

FAQ: What if I can't find this information? If there are places where information is unknown/not gathered, please note this in the section, along with plans to ensure that the information will be gathered and available within the next two years.

FAQ – Do I have to use this reporting format? If you already have a written Student Learning Outcome (SLO) plan you can use that for this section. If there are suggested NAEAA skills/knowledge areas that your curriculum does not address (or are not in your SLO), you should address those separately. If you do not have a written SLO – the prescriptive format of this section will help you create one. ***Note that this FAQ applies to all areas in Section II.***

Using the table below (or another format of your choosing), identify the class and/or activity through which each IOE knowledge area is introduced, reinforced, and where mastery is assessed. When possible, provide syllabi and examples of outcomes assessment tools in the Appendix. If an area is not addressed within the curriculum, please place NA in the table and the subsequent area questions. Please note that the prescribed areas within the table were determined from NAEAA member input as being important across program types. Space is provided within the table for the addition of program specific equine skills and knowledge areas critical to the nature of the program. Examples could include: riding, training, breeding, genetics as well as business or finance areas.

	NAEAA Indicator of Excellence: Equine Skills and Knowledge								
	Demonstrates competence in basic equine health care	Demonstrates competence in safety and handling of equines	Demonstrates competence in equine nutrition	Demonstrates understanding of equine welfare and ethical practices	Demonstrates knowledge of equine anatomy and physiology	Demonstrates …	Demonstrates…	Demonstrates…	Demonstrates…
Where introduced									

Where reinforced									
Where proficiency determined									

1. Demonstrates competence in basic equine health care:
    a. Learning Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:
2. Demonstrates competence in safety and handling of equines:
    a. Learning Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:
3. Demonstrates competence in equine nutrition:
    a. Learning Outcome goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:
4. Demonstrates understanding of equine welfare and ethical practices:
    a. Learning Outcome goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

5. Demonstrates knowledge of equine anatomy and physiology:
    a. Learning Outcome goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:
6. Demonstrates…
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:
7. Demonstrates…
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:
8. Demonstrates…
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

A final assessment measure: Identify the ways in which incoming and exiting knowledge in equine skills and knowledge is assessed, shared, and used for ongoing programmatic improvements:

Section II A. SWOT Analysis for Equine Knowledge and Skills: Using the information provided in this section; identify the key strengths, weaknesses, opportunities and threats that emerge for this IOE.

Strengths	**Weaknesses**
Opportunities	**Threats**

Reviewer Commendations and Recommendations:

Notes to reviewers - Consider the following areas as you offer commendations and recommendations related to this section:

- Appropriateness of target goal assigned to each LOG
- Appropriateness of rigor applied to each LOG in relationship to program mission and objectives
- Approach to assessing each learning outcomes area in order to gather realistic and reliable results
- Results of LOG assessment in relationship to program mission and objectives along with anticipated graduate trajectories
- Appropriateness of Plans for Improvement if/when LOG targets are not met

Section II. B. IOE: Critical Thinking and Communication

FAQ: Why am I collecting this information? Measuring and reporting on areas within the IOE of Critical Thinking and Communication provides a look at the ways in which students are meeting the goals and objectives of the curriculum. This IOE is often considered under 'soft skills' repeatedly identified as important to employers. The common set of areas provides context that is comparable across similar institutions and programs committed to excellence in their equine undergraduate offerings. Unique areas identified by the equine program provide a look at other learning features important to the program.

FAQ: Where am I likely to find this information? This information is typically provided by the equine department chair and faculty yet can also be considered through conversations regarding assessment measures across other departments that hold required courses within the curriculum.

FAQ: What if I can't find this information? If there are places where information is unknown/not gathered, please note this in the section along with plans to ensure that the information will be gathered and available within the next two years.

Using the table below (or another format of your choosing), identify the class and/or activity through which each IOE area is introduced, reinforced, and where mastery assessed. When possible, provide syllabi and examples of outcomes assessment tools in the Appendix. If an area is not addressed within the curriculum, please place NA in the table and the subsequent area questions.

	NAEE Indicator of Excellence Learning: Critical Thinking and Communication							
	Demonstrates Competence in Reasoning	Demonstrates Competence in Information Literacy	Demonstrates Competence in Oral Communication	Demonstrates Competence in Written Communication	Demonstrates Competence in Communication with Professionals	Demonstrates Competence in Communication with Peers	Demonstrates Competence in Use of Industry Terminology	Demonstrates Competence in Ethical Decision Making
Where introduced								
Where reinforced								
Where proficiency determined								

1. Demonstrates competence in reasoning (utilizing information and applying it to decision making)
    a. Learning Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

2. Demonstrates competence in finding and using information that is seen as trusted and relevant (information literacy)
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

3. Demonstrates competence in oral communication
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

4. Demonstrates competence in written communication
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

5. Demonstrates competence in communication with professionals
    a. Learning Outcome Goal

b. Benchmark:
c. Method(s) of assessment:
d. Results of assessment:
e. Plan for improvement if LOG is not met:

6. Demonstrates competence in communication with peers
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

7. Demonstrates competence in use of industry terminology
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

8. Demonstrates competence in ethical decision making
    a. Learning Outcome Goal
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if LOG is not met:

Section II B. SWOT Analysis Critical Thinking and Communication

Using the information provided in this section; identify the key strengths, weaknesses, opportunities and threats that emerge for this IOE.

Strengths	**Weaknesses**
Opportunities	**Threats**

Reviewer Commendations and Recommendations:

Notes to reviewers - Consider the following areas as you offer commendations and recommendations related to this section:

- Appropriateness of target goal assigned to each LOG
- Appropriateness of rigor applied to each LOG in relationship to program mission and objectives
- Approach to assessing each learning outcomes area in order to gather realistic and reliable results
- Results of LOG assessment in relationship to program mission and objectives along with anticipated graduate trajectories
- Appropriateness of Plans for Improvement if/when LOG targets are not met

Section II. C. IOE: Trajectory of Graduates from the Program

FAQ: Why am I collecting this information? Measuring and reporting on areas within the IOE of Graduate Trajectory provides a look at the ways in which students are graduating with the skills and knowledge to pursue careers and/or graduate school upon degree completion. The pressures on higher education to track, assess, and share this information is only expected to increase. While institutions have long gathered this information on the graduating study body as a whole, it is imperative that career focused programs have systematic processes to gather this information in a way that can be extrapolated specifically to equine programs – and include information key to the mission, goals and objectives of the equine program.

FAQ: Where am I likely to find this information? This is typically the most challenging IOE for which to locate information. Most institutions have career, alumni and/or institutional advancements offices that gather this information for the institution as a whole. Equine program faculty should work with those offices to identify what historical information is available and how the equine graduate information can be extrapolated and shared. Few have a systematic process to gather program specific data yet it is important to begin this process if it is not already in place. At minimum, equine program faculty and staff should be able to gather and provide anecdotal data during first use of the IOE document.

FAQ: What if I can't find this information? If there are places where information is unknown/not gathered, please note this in the section, along with plans to ensure that the information will be gathered and available within the next two years.

A. Internship Site Feedback (if internships are part of the program)

- ✓ Yes/No – are internships required in this program?
- ✓ Yes/No – are internships elective but strongly required in this program?
- ✓ Yes/No – are internship supervisors asked to complete an evaluation of student knowledge and skills?

1. Satisfaction of students with internship site placement
    a. Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if OG is not met:

2. Satisfaction of internship sites with student performance

a. Outcome Goal:
b. Benchmark:
c. Method(s) of assessment:
d. Results of assessment:
e. Plan for improvement if OG is not met:

3. Extent to which industry seeks interns from your program
    a. Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if OG is not met:

Graduating Student Feedback

Please describe tools used to gather feedback from students at point of graduation. Include in description the tool(s) used, who administers, and key findings.

Alumni Feedback

Please describe tools used to gather feedback from alumni at point of graduation. Include in description the tool(s) used, who administers, and key findings.

1. Employment rate of graduates
    a. Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if OG is not met:

2. Employment rates of graduates within their field of study
    a. Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if OG is not met:

3. Continuing education rate of graduates
    a. Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if OG is not met:

4. Satisfaction of graduates with employment/continuing education
    a. Outcome Goal:
    b. Benchmark:
    c. Method(s) of assessment:
    d. Results of assessment:
    e. Plan for improvement if OG is not met:

Employer Feedback

Please describe tools used to gather feedback from alumni at point of graduation. Include in description the tool(s) used, who administers, and key findings.

Section II C. SWOT: Trajectory of Graduates from the Program

Using the information provided in this section; identify the key strengths, weaknesses, opportunities and threats that emerge for this IOE.

Strengths	**Weaknesses**
Opportunities	**Threats**

Reviewer Commendations and Recommendations:

Notes to reviewers - Consider the following areas as you offer commendations and recommendations related to this section:

- This is typically the most challenging section to complete. Yet, this kind of data is increasingly important for transparency to students, families and stakeholders.
- Graduating Student data is typically available in some form. It may be full institutional data and not specific to equine. However, most institutions will be able to separate data out by major. If this information is not provided in the self-study, reviewers are urged to ask for it during the site visit. Often external review teams requests can result in the data being provided.
- If the equine program is not collecting data from graduating students regarding satisfaction with preparation for careers/further education and plans post-graduation, this should be added to the list of recommendations.
- Alumni data falls into the same category of graduating student data in terms of typical accessibility during a first external review.
- If the equine program is not collecting data from program alumni regarding satisfaction with preparation for careers/further education and post-graduation career trajectory, this should be added to the list of recommendations. Alumni data is typically gathered 2-3 years post-graduation and then in 5-year cycles.
- Internship data should be available for students during internships. Examine the assessment tool to determine if it is a general tool used across programs at the institution OR if it is specific to equine. If there are not areas specific to learning outcome goals for the equine program, those should be added and become part of the recommendations.
- Employer (including graduate school) satisfaction with alumni is critically important. Yet, it is rarely systematically gathered. As part of the commitment to NAEAA Standards of Excellence, data collection from employers should be part of assessing equine programs learning outcome goals related to preparation for careers and/or further education.
- Data collection in the IOE of graduate trajectory can be incredibly time consuming – particularly at the start. Recommendations from the review team on including this as part of the workload of the alumni office and/or institutional research is encouraged. Alternatively, recommendations for reduction in workload for a faculty member with skills in this area is appropriate.

Appendix E: Resources for teaching agricultural equipment operations skills

Example syllabi

The syllabi provided as handouts for this discussion were provided by Mark Schleppi, Ohio State ATI, and Debra Powell, Hocking College.

Ohio State ATI

Engineering Technology 2015T
Agricultural Equipment Operation and Maintenance

Autumn 2021
Course Organization:

Credits: 2
Distribution of Class Time: 1 lecture, 1 2-hr rec, and 1 2-hr lab
Prerequisites: None
Meeting times: Autumn Semester; Rec: Thursday 11:30 am – 1:20 pm; Lab: W 4:10- 6:15 pm; Lecture: W 6:30-7:25 pm

Instructor Information:

Mark Schleppi
131A Skou Hall
330-287-1310
schleppi.9@osu.edu
Office hours are by appointment via Zoom. If you need to meet with me, please schedule the meeting via email and I will send you a Zoom Link & password.

Course Description:

A study of tractors and other agricultural equipment with emphasis on operation, maintenance, and adjustment for safe, efficient operation.

Course Location:

Unless otherwise indicated by the instructor the class will meet at the GDAL Land Lab Building.
The US postal address of the Land Lab Building is 6197 Dover Road Apple Creek, OH 44606

Course Objectives:

The student will be able to:

A. Demonstrate proficiency in the safe operation of tractors and other agricultural equipment.
B. Identify and demonstrate the use of tools and equipment for servicing agricultural equipment.
C. Service and make operational adjustments and minor repairs on selected agricultural equipment according to procedures described in the operator's manual.

Required reading by week can be found in Carmen.

Course Policies in an evolving learning environment:

*Facemasks must be worn at all times during lecture, lab, & recitation
*A seating chart with assigned seats will be used
*Students will be responsible for wiping down and sanitizing their classroom area before leaving
*students will be responsible for sanitizing tractors and equipment before and after use.
*disposable gloves will be used during some lab activities
*This course may use video and audio recordings of class lectures, student presentations, and related materials. These recordings are available to all students presently enrolled in the course. Please note that you are not allowed to share these recordings. This is to protect your FERPA rights and those of your fellow students.
*Health and safety requirements: All students, faculty and staff are required to comply with and stay up to date on all university safety and health guidance (https://safeandhealthy.osu.edu). Non-compliance will result in a warning first, and disciplinary actions will be taken for repeated offenses.

Course Content

A. Safety Basics and Agricultural Hazards

B. Internal combustion engines

C.
1. Principles
2. Specifications
3. Types
4. Horsepower
5. Fuel Systems
6. Lubricants and Lubrication Systems
7. Cooling Systems

D. Basic Electrical Systems
E. Hydraulics
F. Safe operation and maintenance of tractors
G. Safe operation and maintenance of skid steer loaders
H. Safe operation and maintenance of mowers, brush hogs, and manure spreaders
I. Trailer specifications, maintenance, and troubleshooting
J. Safe operation and maintenance of trailers, wagons, etc.

Laboratory Experiences:
A. Pre-operation checks
B. Safe operation and maintenance of tractors
C. Safe operation and maintenance of skid steer loaders
D. Safe operation and maintenance of mowers and brush hogs
E. Safe operation and maintenance of manure spreaders
F. Trailer specifications, maintenance, and troubleshooting
G. Safe operation and maintenance of trailers, wagons, etc.
H. Safe operation and maintenance of small gasoline engines (weed eaters, etc.)

Evaluation Criteria:

Quizzes	15%
Lab Exercises	25%
Homework	10%
Midterm	15%
Lab Practical	15%
Final Exam	20%
	100%

If you miss a quiz it can not be made up! Quizzes can either be announced or unannounced. You are expected to be present for the midterm, lab practical, & final exam. If you have a valid excuse (sickness etc.) you must make alternate arrangements with the instructor prior to the exam being given. This needs to be done through a conversation! You can not simply email me minutes before the exam starts and tell me you are unable to be there. When assignments are presented to the class the due date is made clear. Late assignments will not be accepted. **All assignments will be submitted online into the Carmen ENGTECH 2015T Course so bring a mobile device that will connect to the internet to every class.**

Grading Scale:

A	93-100
A-	90-92.9
B+	87-89.9
B	83-86.9
B-	80-82.9

C+	77-79.9
C	73-76.9
C-	70-72.9
D+	67-69.9
D	60-66.9
E	≤ 59.9

Texts and Supplies:

National Safe Tractor and Machinery Operation Program Student Manual. Lakeville, MN: Hobar Publications, 2006 (on-line) [www.nstmop.psu.edu] (NSTMOP)

References:

Deere and Company. Fundamentals of Machine Operation: Preventative Maintenance. Moline, IL: John Deere Publishing, 2007

General Information:

*The use of tobacco is prohibited on all OSU property and campuses.
*Discrimination against any individual for any reason is prohibited.
***Mobile phones must be turned off during class.**
*We will be operating equipment **OUTSIDE** for much of the semester. Other times will be spent in an unheated laboratory. **DRESS FOR OUTDOOR WEATHER EVERYTIME YOU COME TO CLASS**.
*Safety glasses, closed-toe shoes, and safe/non-baggy clothing may be required.
*Your full participation and attendance is expected while in the laboratory.
* **A valid Driver's License that does not have excessive infractions on it will be required for this course in order that students can operate University machinery and vehicles!**
*It will be difficult for you to derive the maximum benefit from this course if you are not present and participating so plan on attending all class sessions. If you miss a class for some reason you are still responsible for the material that was covered.
*Participation will be a component of your grade.

Students are not permitted to enter or remain on property or facilities owned or controlled by The Ohio State University outside of normal class hours or without authorization by university faculty or officials. Students are likewise not permitted to engage in any unauthorized activities on or at facilities owned or controlled by the University, including, but not limited to, unauthorized photography or filming in any format, of animals, equipment, or facilities. Any person found to have violated these restrictions may be subject to any available civil, criminal, or administrative sanctions, including student disciplinary proceedings and/or criminal prosecution.

General University policies omitted for the sake of space

Welcome to Stable & Facility Management

This course covers the practical experience in barn & small farm management involving operating farm machinery, facility maintenance, resource management, as well as introduction to supervising workers and problem solving that is involved in the proper management of an equine facility.

HOCKING COLLEGE

Course Syllabus

Course Name: Stable & Facility Management
Course ID: EQSI-1132-C011
Credit Hours: 3
Prerequisites: none
Approved by:

_____
Dean signature Date

Course Learning Objectives

In this course you will learn to:

1. Discuss and apply proper operation, maintenance, and safety practices of basic types of farm equipment.
2. Discuss and apply proper safety and maintenance practices of equestrian facilities, including barns, pastures, and storage areas.
3. Discuss supervising workers and problem solving skills.
4. Develop mastery of the Success Skills identified for this course.

This course also helps fulfill these Program Outcomes (PO) and these associated Success Skills (SS):

PO1. Effectively gather, assimilate, analyze, and express the science, care, and husbandry of the equine species.
- **SS - CT.** Problem Solving & Critical Thinking
- **SS - MS.** Math Skills that a student will encounter both on the job and in everyday life
- **SS - IT.** Aspects of technology and technology usage in and for the workplace

PO2. Demonstrate the ability to work collaboratively and effectively in a team environment.
- **SS - CT**. Problem Solving & Critical Thinking
- **SS - GA**. Maintains community, global and cultural awareness

PO3. Model personal and professional conduct and ethics consistent with best practices within the equine industry.

SS - PA. Maintains Professional Skills & Attitudes
SS - ET. Citizenship & Morals of Everyday Living
SS - HR. Interact Efficiently with Other People, both on the job and in everyday life

PO4. Demonstrate skill at formulating and supporting positions using effective and clear written, oral, and visual communication.

SS - CE. The CE success skill deals with written and verbal communications skills and its subcomponents such as reading, grammar, public speaking and listening skills

Books/Materials you need

- All students are required to have a laptop or tablet meeting the specifications of the Hocking technical specs policy. Having a computer will ensure you can succeed by staying connected to your college email and having access to course components that are online.

- Required Textbook:
  - There is no formal textbook required for this course.
  - Other items you are strongly encouraged to bring that will assist with your success in this course include:
    - 3-ring binder for storing class work/notes/handouts
    - Paper for taking class notes
    - Pens/pencils
    - Clipboard

- All students must possess a current driver's license prior to taking this course. If you do not, please check with driver's education to sign-up.

- Additional practice times with instructor are required for proficiency of operation and use of all equipment and implements in this course.

- If proficiency of equipment has not been established (as determined by instructor), student must make arrangements to re-take that section of the course.

What to typically expect when you go to class

Class sessions can be held:

- in a traditional classroom
- within the horse barn
- within the indoor arena
- within the outdoor arena
- on the road
- in a pasture/field

Class sessions may involve:

- lectures
- discussions
- group projects
- hands-on working/practice sessions with the equipment; technology associated with topics
- off-campus industry visits

Appropriate dress is required for this course.

- No pajamas, halter tops, bare midriff tops or clothing which constitutes as indecent exposure.
- You will be asked to remove yourself from the class if you show up inappropriately dressed and unless you return dressed appropriately, you will:
    - be given a zero for any activity that occurred on that session day
    - receive zero points for your class engagement
    - receive a zero if a quiz was scheduled for that session
    - receive a zero if an exam was scheduled for that session
- You will be working with and around horses and farm equipment, proper footwear (closed-toed boots) and clothing (jeans and shirts) will be required; no shorts will be allowed.
- Appropriate dress, representative of Hocking College, is required for any class session which takes you to an off-campus business.
- Appropriate dress for the weather is required. Coveralls or bibs, gloves, hats, ear muffs are strongly recommended during the winter months as the barn is not heated. Air-activated hand warmers are also helpful.
- Safety is of utmost importance when working with and around equipment.
    - You must follow your instructor's safety protocols at all times. Failure to comply with safety practices and/or willful

disregard for classmates and/or equipment may be cause for immediate dismissal from that class session by the instructor with an immediate letter grade reduction in the course.

For asynchronous online sections, which means there are no scheduled meeting times:

- Blackboard assignments will take place of in-person assignments
- These assignments may include discussion boards related to a specific problem question; journal assignment; video assignment; etc.
- Primary communication with your instructor during this type of session can be made via email; phone call or text (if instructor allows)
- Frequently checking and responding to your emails will greatly assist in your success in this course.

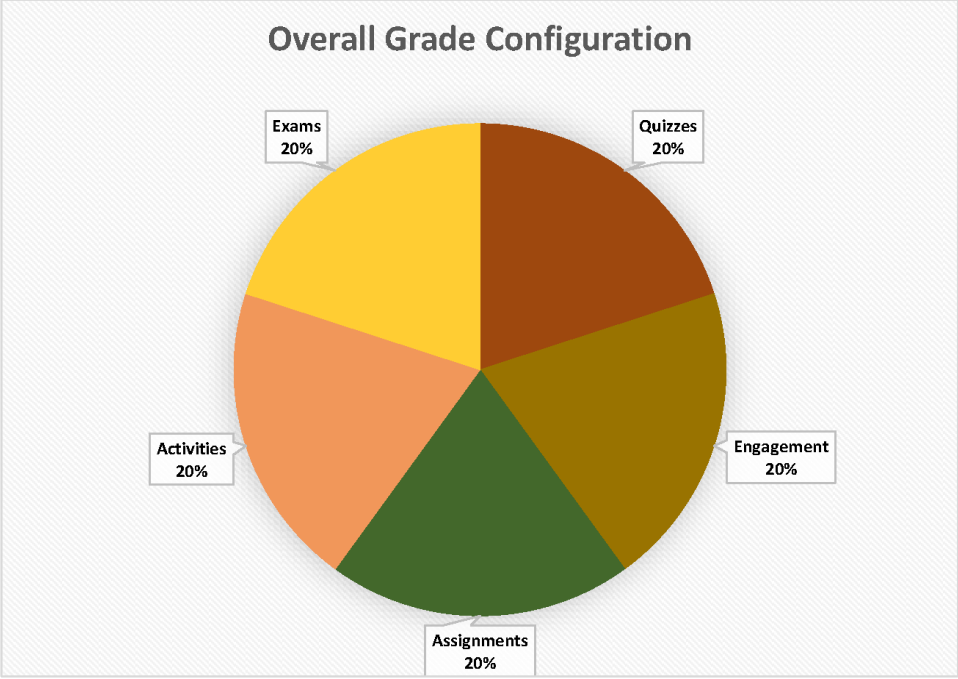
Types of Assignments/Activities

Week	Topics	Readings	Assignments	Activities
1	Introduction, Expectations Facilities: Site, Layout, Barn, Interior, Construction, Outbuildings, Safety	Power Point for Lecture 1: Stables and Facility Management	Read syllabus, prepare for discussion Barn/Stable Layout (date TBD)	Tour barns and grounds, identify features and considerations discussed in class
2	Equipment: Truck and Horse Trailer	Power Point for Lecture 2: Equipment-Truck and Horse Trailer	Trailer Hauling Assignment	Review Truck operations, maintenance, and safety Gas and diesel trucks will be covered

				Practice hooking/unhooking, driving and backing horse trailer (2-horse bumper pull; 6-horse slant-load goose neck; 8-horse livestock goose neck) Note: driving and backing will be with and without full-load of horses in trailer and will be conducted on campus and over open road
3	Equipment: Tractor and Implements	Power Point for Lecture 3: Equipment-Tractor and Implements	Tractor Safety, Hand Signals, Tractor Operation	Review Tractor operations, maintenance, and safety Practice operating tractor Practice hooking/unhooking & using front loader on tractor
				Practice hooking/unhooking & operating manure spreader Practice hooking/unhooking & operating groomer and tractor while working large and small outdoor arenas
4	Fencing: Planning, selection, construction, repair, maintenance, use	PowerPoint for Lecture 4: Fencing	Fencing Design Plan	Assess equine fencing for maintenance needs Identify Needed maintenance/ repairs, Perform any needed

5	Management: Barn, Water, Land, Sanitation	PowerPoint for Lecture 5: Facility Management	Bedding/Composting Assignment	Visit bedding storage, composting facilities
6	Disasters and Security	PowerPoint for Lecture 6: Disasters, Security	Facility Insurance/Horse Insurance plan (including quotes)	Explore needs and options for insurance
7	Work Routines, Records, Resource Management	PowerPoint for Lecture 7: Work Routines, Records, Resource Management	Develop "Employee Assignment" form (ie checklist for tasks to be performed per shift)	Develop "Vet Form" (things to tell the vet when you call)
8	Human Resources Final Practicum	PowerPoint for Lecture 8: Human Resources	Develop a "scenario" for an Employer/Employee interaction	Role playing/practice using student-created scenarios for Employer/Employee interactions
Course/Instructor Evaluation		Near the end of the course, there will be an online survey available to evaluate aspects of the course and instructor. Your feedback is valued and will help drive improvements in the course design, delivery, and instruction. Please check your Blackboard course.		

Course Grade



Grading Scale

Hocking College grading scale to be used for all courses.

93% - 100% = A	73% - 76% = C
90% - 92% = A-	70% - 72% = C-
87% - 89% = B+	68% - 69% = D+
83% - 86% = B	66% - 67% = D
80% - 82% = B-	65% = D-
77% - 79% = C+	0% - 64% = F

Hocking College **Syllabus page 8**

ENGAGEMENT RUBRIC for students

ENGAGEMENT	PREPARATION (outside of class time)	PARTICIPATION (in class)	Points Assigned
I am fully engaged	Exemplary Preparation • I read carefully any assignment ahead of time and research background information on the topic ahead of time • I consider the course's essential questions as I prepare	Animated Participation • I attend class and I speak daily • I try to advance the conversation by presenting or suggesting evidence to support my ideas or questions • I present related research, implications or complexities in the text/topic	1.00
I am occasionally engaged	Novice Preparation • I read assignments ahead of time • I do basic research to understand the material, but I do not go beyond the obvious • Sometimes I consider the course's essential questions as I prepare	Occasional Participation • I attend class daily • I speak occasionally but mainly only when called upon • Sometimes I present general evidence to support my position or questions	0.50
I'm not sure how to be engaged; I need assistance	Inadequate preparation • Sometimes I do the reading • I don't research to understand the material, nor do I go beyond the obvious	Inadequate Participation • My attendance is inconsistent • I participate only when called upon	0.25
I am not engaged	No preparation • I neither read nor do any research before class	No participation • My attendance is inconsistent • I do not speak in class even when called upon	0.00

Submission Policies

Exams

- Each exam will be scheduled for a 50-minute period that will be taken at the beginning of class
- A study guide may be provided at least one week prior to each scheduled exam

Final Exam

- A final exam will be given during the last class of the 8th week of the course. The exam will be comprehensive (includes lecture and laboratory activities)

Quizzes

- A short quiz may be given at the beginning of each week at the beginning of class time. Quizzes will test the knowledge of topics/skills covered during the previous class week. Quizzes are designed to be completed within 3 to 5 minutes and will be self-graded.

Activities

- Weekly practice activities are scheduled to introduce the student to various farm equipment and correct usage
- Student performance within each activity will be evaluated at the completion of each activity

Assignments

- Assignments, written or oral, will be given to examine the knowledge and problem solving of topics covered in this course

A portion of the graded points are related to Engagement in class and laboratory activities. The following factors are considered "Engagement": taking part in discussions, asking questions, answering questions, being attentive in class. In order to participate, you must be present.

Habitual lateness will affect your engagement grade. A copy of an engagement rubric is included at the end of this syllabus. Please take the time to review this so that you will experience full use of your participation in this course.

Failure to attend class and habitual lateness reflects poorly on an individual and often inconveniences other in the class. In order to reschedule a missed exam/quiz or make up a missed assignment, you must have an excused absence.

The following are defined as excused absences (Instructor shall have the right to request appropriate verification and approve excused absence):

A. *Significant illness of the student or serious illness of a member of the student's household or immediate family.*
B. *Death of a member of the student's household or family.*
C. *Trips for members of student organizations sponsored by the college.*
D. *Major Religious Holidays.*
E. *Any other circumstances which the instructor finds reasonable cause for absence.*

Any Late assignments will recieve the following penalty:

0.1– 24 hrs late = -20%
>24-48 hrs late = -35%
>48 hrs late = Not accepted (grade of zero)

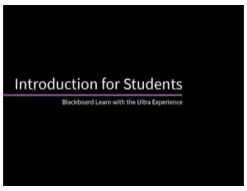
Tips for Succeeding in this Course

- ☆ Check your email at least twice daily.
- ☆ Attend and participate in all class sessions.
- ☆ Ask questions. Ask for help. Ask for clarification.
- ☆ Bring all necessary materials with you to every class session.
- ☆ Review your material every day.
- ☆ Learn and practice time management.
- ☆ Learn and practice healthy eating and rest habits.
- ☆ Use the Academic Success Center to assist you with tutoring, study skills, testing resources.
- ☆ Come to all scheduled study sessions.
- ☆ Read and Use the study guides.
- ☆ Do not wait until the last minute to do assignments, to study for quizzes or exams.
- ☆ Be receptive to learning new and different skills and techniques and new ways of performing tasks.

Blackboard

All Hocking College courses are delivered in conjunction with our Learning Management System Blackboard. Students are expected to actively log into their Blackboard account and subsequent courses on a regular basis. You will find information about how to contact your professor, assignments, grades, and more for your courses in Blackboard.

Click the image to view a 2-minute introduction to Blackboard:



You can access your courses in Blackboard in the Hocking College app OR by going to the Hocking College website at www.hocking.edu and clicking the Blackboard link near the top.

Attendance Policy

In support of preparing Hocking College students for the world of work, the following policy has been developed to model work environments they will enter upon graduation.

The expectation is that students attend all classes. In the event of illness or emergency, it may be necessary for a student to miss a class. To report an absence, a student must contact their faculty member in advance and make arrangements to complete all required coursework.

Policy

In an 8-week course, students have 1 Unexcused Absence
In a 16-week course, students have 2 Unexcused Absences

Unexcused absences greater than the above will result in being administratively DROPPED from the course(s). Students administratively DROPPED from a course(s) will not be re-admitted. They will be required to repeat the course to complete the program and are responsible for all associated charges.

The College is not responsible for the student's failure to follow the official withdraw policy. Students will be responsible for tuition and fees according to the refund policy.

General College policies omitted for the sake of space

Links to further resources mentioned in the discussion

Provided by Michael L. Pate, Utah State University.

- National Safe Tractor and Machinery Operation Program: https://extension.psu.edu/national-safe-tractor-and-machinery-operation-program
- GEARING UP for safety: https://www.asec.purdue.edu/tractor/index.html
- Safety in Agriculture for Youth: https://ag-safety.extension.org/safety-in-agriculture-for-youth/
- Certificate courses:
    - https://ag-safety.extension.org/agsafety4u-certificate-course/
    - https://www.careersafeonline.com/courses/agriculture-industry
    - https://gooddayswork.ag/

Rubrics shared after conference

Provided by Lyn Roy Schuerman, Equine Production, Mid-America Tech Center.
Further materials, including PowerPoints on these topics, available upon request.

-2nd Year Performance Tests-

Enclosed in this manila envelope are your **2nd Year Performance Tests.** This sheet will list all of the tests with the exception of the group performance tests, Reasons and Showmanship. If you want to redo a performance test they are located at the back of the second year room in the top drawer of the file cabinet. **Do Not Loose This Envelope.** It will cost you **$10.00** to replace these tests. As you know by now performance tests are an extremely important part of your grade, accounting for 30%. You can use this sheet to check off and date when you have completed each test. Those tests are:

- □ Safety Test _____
- □ Driving Tractor _____
- □ Driving Workhorse _____
- □ Operating Manure Spreader _____
- □ Administering Vaccinations _____
- □ Braiding Mane and Tail _____
- □ Banding A Mane _____
- □ Clipping The Horse _____
- □ Bathing The Horse _____
- □ Pulling The Mane _____
- □ Training To The Round Pen _____
- □ Train To Walker _____
- □ Performing Final Details At Sale ___
- □ Presenting Horse At Public Auction __
- □ Use Thermometer _____
- □ Monitor Vital Signs _____
- □ Wash Items For Autoclave _____
- □ Use Autoclave _____
- □ Use Microscope _____
- □ Drawing Blood and Hematocrit _____
- □ Cleaning Tack _____
- □ Trim Hooves _____
- □ Handle Tease Stallion _____
- □ Wash Perineal Area _____
- □ Prepare Artificial Vagina _____
- □ Prepare Breeding Stallion _____
- □ Handle Stallion During Collection _____
- □ Collect Stallion _____
- □ Calibrate Densimeter _____
- □ Evaluate Raw and Extended Semen _____
- □ Prepare an Insemination Dose _____
- □ Prepare Shipped Semen _____
- □ Use Equine Colostrum Refractometer _____
- □ Use Colostrometer _____
- □ Evaluate Fecal Float _____
- □ Monitor Teasing System _____
- □ Evaluate Fecal Float _____
- □ Monitor Teasing System _____
- □ Administer Subq Inj. _____
- □ Weighing and Sticking _____
- □ Braid Lead Rope _____
- □ Lift, Clean, and Ck Hoof _____
- □ Wrapping Legs _____
- □ Load/Unload Horses in Trailer _____
- □ Dressing/Treating Wounds _____
- □ Build Rope Halter _____
- □ Passing a Pipette _____
- □ Saddling a Horse _____
- □ Tying A Bowline Knot _____
- □ Handle Stallion During Live Cover ____
- □ Handle Mare During Live Cover _____
- □ Showmanship (group) _____
- □ Oral Reasons (group) _____

PERFORMANCE TEST – GENERAL RANCH WORK

DRIVING THE TRACTOR - John Deere 2155

STUDENT'S NAME _____DATE _____

INSTRUCTOR'S NAME _____ATTEMPT NO. _____

OBJECTIVE: Given the tractor the student will be able to safely drive it, engage the PTO shaft, identify forward and reverse gears, check appropriate fluid levels, and hook up to the manure spreader.

STUDENT INSTRUCTIONS: One job preformed by varied personnel in the horse industry is the operation of tractors. Personal safety is of the utmost importance. Along with an understanding of proper maintenance and correct driving procedures, the student must use appropriate methods while driving around the horses and always yield to the horses. You must first view the tractor safety video, "Tractor Accidents, It's Not Going to Happen to Me", and pass the written tractor safety test with 100% accuracy. You have been practicing and familiarizing yourself with the tractor and now your performance is to be evaluated. Familiarize yourself with the rating scale. Now follow these steps:

1) View the tractor safety video. _____

2) Pass the written tractor safety test with 100% accuracy. _____

3) Acquire the tractor, when not in use, and a **rag (used for checking oil).**

4) Notify your instructor when you are ready to begin.

5) Follow the instructor's commands and answer his questions.

6) As soon as you have completed this test your performance will be graded.

PROCESS EVALUATION

Rate the student's ability to perform each of the following steps:

	TASK	RATING				
1)	Check fluids, (hydraulic, diesel, radiator, engine oil)	0	1	2	3	4
2)	Check tires	0	1	2	3	4
3)	ID forward gears	0	1	2	3	4
4)	ID reverse gears	0	1	2	3	4
5)	Locate clutch	0	1	2	3	4
6)	Locate brakes	0	1	2	3	4
7)	Locate parking brake	0	1	2	3	4
8)	Locate PTO lever	0	1	2	3	4
9)	ID correct PTO setting	0	1	2	3	4
10)	Locate hand throttle	0	1	2	3	4
11)	Locate foot throttle	0	1	2	3	4
12)	Locate hydraulic lever	0	1	2	3	4
13)	Locate fuel shut off knob	0	1	2	3	4
14)	Are brakes locked together or unlocked?	0……..4				
15)	Locate fuel gauge and identify how much diesel is present	0	1	2	3	4
16)	**AVERAGE SCORE**	**0**	**1**	**2**	**3**	**4**

INSTRUCTOR'S COMMENTS: _____

_____

_____

_____

PRODUCT EVALUATION

Rate the student on the following criteria. The evaluation should be based with major emphasis on safety. Score accordingly with regard to driving ability.

	CRITERIA	RATING				
1)	Start tractor	0	1	2	3	4
2)	Release parking brake	0	1	2	3	4
3)	Raise and lower 3-point hookup	0	1	2	3	4
4)	Drive forward in 2nd gear (L2)	0	1	2	3	4
5)	Drive forward in 5th gear (H5)	0	1	2	3	4

6)	Drive a figure “8” around pylons	0	1	2	3	4
7)	Back a figure “8” around pylons	0	1	2	3	4
8)	Drive through pylons (L4)	0	1	2	3	4
9)	Back through pylons (R3)	0	1	2	3	4
10)	Back up to manure spreader (R1)	0	1	2	3	4
11)	Stop when able to drop pin into drawbar and tongue	0	1	2	3	4
12)	Place gears into neutral position	0	1	2	3	4
13)	Engage parking brake	0	1	2	3	4
14)	Shut off engine	0	1	2	3	4
15)	Switched off key	0	1	2	3	4
16)	**AVERAGE SCORE**	**0**	**1**	**2**	**3**	**4**

INSTRUCTOR’S COMMENTS: _____

_____

_____

_____

PERFORMANCE TEST – GENERAL RANCH WORK

DRIVING THE KAWASAKI 600 MULE

STUDENT'S NAME_____DATE_____

INSTRUCTOR'S NAME_____ATT. NO._____

OBJECTIVE: Given the Kawasaki *Mule*, the student will be able to demonstrate driving and using the load bed with 100% accuracy.

STUDENT INSTRUCTIONS: The use of smaller powered driving equipment on ranches has quickly becoming commonplace. Through this performance test you will be tested on your ability to safely drive forwards and backwards, use of the load bed, and to leave the vehicle using the correct procedures. Grading will be based upon your ability to maneuver through a varied obstacle course using appropriate speed and turning abilities not only forward but also backward. Important to note, make sure engine is slowed to idle and motion has ceased before shifting to any gear. Reckless driving will lead to revoking of your ability to drive, so remember to be safe around any and all obstacles. Driving privileges will also be suspended if you do not let instructors know of any accidents and/or injuries as a result of your driving. The *mule* is an invaluable feeding tool, treat it as such.

Prior to taking this test you must have passed the written *Mule* safety test with 100% accuracy. You have been practicing and familiarizing yourself with the *Mule* and now your performance is to be evaluated. Familiarize yourself with the rating scale. Now follow these steps.

1) Pass the written *Mule* safety test with 100% accuracy. _____
2) Acquire the *Mule*, when not in use, and a **rag (used for checking oil).**
3) Notify your instructor when you are ready to begin.
4) Follow the instructor's commands and answer their questions.

5) As soon as you have completed this test your performance will be graded.

PROCESS EVALUATION

Rate the student's ability to perform each of the following steps:

TASK	RATING				
1) Check the engine oil 	0	1	2	3	4
2) Check the tires	0	1	2	3	4
3) Identify bed lift handle	0	1	2	3	4
4) Raise and lower bed 	0	1	2	3	4
5) Identify fuel gauge and cap 	0	1	2	3	4
6) Describe using Differential Gear Lock/Unlock Once Seated	0	1	2	3	4
7) Locate choke	0	1	2	3	4
8) Identify park brake	0	1	2	3	4
9) Identify service brake	0	1	2	3	4
10) Locate accelerator	0	1	2	3	4
11) Identify knob for forward storage compartment	0	1	2	3	4

12)	Turn on engine	0	1	2	3	4
	Driving					
13)	Drive forward through west Main barn doors	0	1	2	3	4
14)	Drive through pylons	0	1	2	3	4
15)	Back through pylons	0	1	2	3	4
16)	Drive into Mare barn up to stall 3	0	1	2	3	4
17)	Back out of Mare barn	0	1	2	3	4
18)	Drive around Mare barn	0	1	2	3	4
19)	Return to Main barn through the east Doors	0	1	2	3	4
	Leaving Vehicle					
20)	Turn selector to Neutral	0	1	2	3	4
21)	Apply parking brake	0	1	2	3	4
22)	Turn key off	0	1	2	3	4
23)	**AVERAGE SCORE (Total/22)**	0	1	2	3	4

PRODUCT EVALUATION

INSTRUCTOR'S NOTE: Rate the student on the following criteria. The evaluation should be based with a major emphasis on safety. Score accordingly with regard to driving ability.

Criteria	Rating				
1) Start Mule	0	1	2	3	4
2) Release park brake	0	1	2	3	4
3) Drive forward through west Main barn doors	0	1	2	3	4
4) Drive through pylons without hitting	0	1	2	3	4

5)	Back through pylons without hitting	0	1	2	3	4
6)	Drive into Mare barn safely	0	1	2	3	4
7)	Safely backed out of Mare barn	0	1	2	3	4
8)	Appropriate speed around Mare barn	0	1	2	3	4
9)	Drove forward through east Main barn doors	0	1	2	3	4
10)	Shifted to Neutral	0	1	2	3	4
11)	Shut off engine	0	1	2	3	4
12)	Applied park brake	0	1	2	3	4
13)	**AVERAGE SCORE (Total/12)**	0	1	2	3	4

PERFORMANCE TEST GENERAL RANCH WORK

FEEDING A ROUND BALE USING 3 POINT AND LOADER

STUDENT'S NAME_____ DATE_____

INSTRUCTOR'S NAME_____ ATPT #_____

OBJECTIVE: Given the loader tractor, round bale forks, scissors/pocket knife, and a round bale, the student will be able to correctly and safely attach the round bale forks, employ the round bale, negotiate the tractor and round bale to the pasture/paddocks, use the loader, feed the round bale, and disconnect the forks following the steps given in lecture and instructor demonstration.

STUDENT INSTRUCTIONS: One of the basic tasks performed routinely on any livestock operation is the use of the "3 point" round bale feeder, either spear or fork type. Due to the high costs of feed and handling of hay, round bales and large square bales have become the feeding practice of choice for pastured horses and cattle. Not only is correct attachment, operation, and detachment crucial, but also handling the loader tractor and bale forks around livestock to prevent injury is critical. Placement of the round bale in order to most effectively utilize all the hay possible is also important. The hay should be placed far from any fence or other obstacle to ward off the dominant horse from "pushing" another into fence or obstacle and injuring, never in a low spot to collect potential rainwater, or in an area in which rotted hay is located. The bale wrap must be completely removed so as a horse does not ingest the plastic. Also, when cutting the bale wrap make sure to avoid injury with the scissors or pocket knife. Always be aware of the location of any horses during the time you are removing the wrap. Remember the potential for injury with the bale mover empty and the forks up. The prerequisites for this test are as follows:

1) Passing the 5105 loader tractor safety test with 100% accuracy.

2) Passing the performance test "Driving the Loader Tractor" with at least 80% accuracy.

3) Observe the instructor demonstration on attachment, employment, and detachment of the bale fork and use of the loader.

Practice is a key to correct operation. Practice this procedure and when you are ready have the instructor grade you on your performance. Familiarize yourself with the rating scale. Now follow these steps:

1) Obtain the tractor with turnbuckle and location of the bale forks.

2) Notify your instructor when you are ready to begin.

3) As soon as you have completed this test, notify your instructor so that your performance may be graded.

PROCESS EVALUATION **INSTRUCTOR'S NOTE:** Using the lecture and demonstration as a guide, determine this student's ability to operate the bale forks. Be sure to check the following criteria using the rating scale below.

4=Skilled, can perform task with no supervision

3=Skilled, but requires supervision

2=Semiskilled, but requires close supervision

1=Unable to perform task

NE=No exposure to this skill

Rate the student's ability to perform each of the following steps:

	TASK	RATING				
	ATTACHMENT					
1)	Obtained equipment	NE	1	2	3	4
2)	Backed tractor (R-1) close to bale forks	NE	1	2	3	4
3)	Removed kingpins from form forks	NE	1	2	3	4
4)	Placed two point arms in correct fork areas	NE	1	2	3	4
5)	"Pinned" in arms	NE	1	2	3	4
6)	Attached turnbuckle to tractor	NE	1	2	3	4
	EMPLOYMENT					
7)	Lifted forks	NE	1	2	3	4
8)	Drove to round bale cache (H-1)	NE	1	2	3	4
9)	Backed up to and centered tractor on round bale	NE	1	2	3	4
10)	Lowered forks	NE	1	2	3	4
11)	Stopped when round bale at frame of forks	NE	1	2	3	4
12)	Picked up round bale	NE	1	2	3	4
13)	Lowered 3 point and dropped bale	NE	1	2	3	4
14)	Turned around and **lowered** loader spikes	NE	1	2	3	4
15)	**Tilted** spikes slightly downward to enter bale	NE	1	2	3	4
16)	**Tilted** bale upward	NE	1	2	3	4
17)	**Raised** loader	NE	1	2	3	4
18)	Drove to sacrifice area and lowered bale to height easy to pull off wrap	NE	1	2	3	4
19)	Lowered 3 point spear to ground	NE	1	2	3	4
20)	Cut wrap low	NE	1	2	3	4
21)	Removed entire wrap	NE	1	2	3	4
22)	Lowered bale	NE	1	2	3	4

23)	Raised 3 point and backed out of bale	NE	1	2	3	4
24)	Raised loader	NE	1	2	3	4
25)	Drove back to equine complex (H-1)	NE	1	2	3	4
	DETACHMENT					
26)	Lowered bale fork in storage area	NE	1	2	3	4
27)	Disconnected turnbuckle	NE	1	2	3	4
28)	Unhooked kingpins from 2 point arms	NE	1	2	3	4
29)	Parked tractor and correctly shut off	NE	1	2	3	4
30)	**AVERAGE SCORE**	**NE**	**1**	**2**	**3**	**4**

INSTRUCTOR'S COMMENTS:_____

_____

_____

PRODUCT EVALUATION **INSTRUCTOR'S NOTE:** Rate the student on the following criteria. Correct attachment, safe driving to, during, and from, and correct detachment. Also total removal of wrap and correct placement of round bale.

	CRITERIA			RATING		
1)	Safe attachment	NE	1	2	3	4
2)	Correct driving to bale cache	NE	1	2	3	4
3)	Safe operation	NE	1	2	3	4
4)	Correct placement of round bale	NE	1	2	3	4
5)	Correct use of loader	NE	1	2	3	4
6)	Complete removal of wrap	NE	1	2	3	4
7)	Correct driving back to equine complex	NE	1	2	3	4
8)	Safe detachment	NE	1	2	3	4
9)	**AVERAGE SCORE**	**NE**	**1**	**2**	**3**	**4**

INSTRUCTOR'S COMMENTS:_____

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PERFORMANCE TEST GENERAL RANCH WORK

OPERATING THE JD MS117 MANURE SPREADER

Student's Name _____Date_____

Instructor's Name _____Attempt #____

OBJECTIVE: Given the tractor and a full manure spreader, the student will be able to correctly and safely spread manure following the steps given in lecture, handout, and instructor demonstration.

STUDENT INSTRUCTIONS: One of the basic tasks performed routinely on any livestock operation is the use of the manure spreader. Manure management is a key to horse health, parasite control, farm esthetics, environmental concerns, etc… Correct hookup, operation, and detachment of the implement is a crucial as the costs of both tractor and implement and your personal safety are essential. Remember also when leaving and returning to the equine complex to take a wide turn when entering and leaving the lane between paddocks B and C so as not to catch the inside tire of the manure spreader on the corner post of paddock B. Also remember when using the spreader to drive straight or if need be to make a wide, sweeping turn with the PTO engaged as tight turns are hard on the "U" joints. The prerequisites to this test are as follows:

1) View the tractor safety video
2) Observe the instructor demonstration of the tractor
3) Pass the tractor safety test with 100% accuracy

4) Observe the instructor demonstration on hookup, operation of, and detachment of the manure spreader
5) Pass the written manure spreader test with 100% accuracy
6) Practice operating the spreader with instructor approval and presence

Practice is a key ingredient to correct operation. Practice this procedure and when you are ready have the instructor grade you on your performance. Familiarize yourself with the rating scale. Now follow these steps:

1) Obtain the tractor and full manure spreader.
2) Notify your instructor when you are ready to begin.
3) As soon as you have completed this test, notify your instructor so that your performance may be graded.

PROCESS EVALUATION

INSTRUCTOR'S NOTE: Using the lecture and demonstration as a guide, determine this student's ability to operate the manure spreader. Be sure to check the following criteria using the rating scale below.

4 = Skilled, can perform job with no supervision

3 = Skilled, but requires supervision

2 = Semiskilled, but requires close supervision

1 = Unable to perform job

NE = No exposure to this skill

Rate the student's ability to perform each of the following steps:

TASK	RATING				
HOOKUP					
1) Obtained equipment	NE	1	2	3	4
2) Backed tractor (R-1) drawbar to tongue of manure spreader	NE	1	2	3	4
3) Placed tractor in neutral	NE	1	2	3	4
4) Engaged parking brake	NE	1	2	3	4
5) "Pinned" drawbar to tongue	NE	1	2	3	4
6) Connected PTO shaft	NE	1	2	3	4
7) Connected hydraulic lines	NE	1	2	3	4
8) Detached jack and stored	NE	1	2	3	4
OPERATION					
9) Disengaged parking brake	NE	1	2	3	4
10) Drove to instructor identified area for operation (H-5)	NE	1	2	3	4
11) Stopped tractor	NE	1	2	3	4
12) Prior to engaging PTO, make sure the gearbox is in the "low" position	NE	1	2	3	4
13) Raise the hydraulic endgate	NE	1	2	3	4
14) Engage the PTO slowly	NE	1	2	3	4
15) Idle up to 2400 rpm	NE	1	2	3	4
16) Drive as straight as possible	NE	1	2	3	4
17) When empty, shut off PTO	NE	1	2	3	4
18) Lower the hydraulic endgate	NE	1	2	3	4
19) Correctly return to barn area	NE	1	2	3	4
DETACHMENT					
20) Placed tractor in neutral	NE	1	2	3	4
21) Engaged parking brake	NE	1	2	3	4
22) Turn off engine	NE	1	2	3	4

23)	Attached jack and lifted tongue	NE	1	2	3	4
24)	Released pressure off hydraulic lines	NE	1	2	3	4
25)	Disconnected hydraulic lines	NE	1	2	3	4
26)	Disconnected PTO shaft	NE	1	2	3	4
27)	"Unpinned" drawbar from tongue	NE	1	2	3	4
28)	**AVERAGE SCORE**	**NE**	**1**	**2**	**3**	**4**

INSTRUCTOR COMMENTS:_____

_____

_____

PRODUCT EVALUATION **INSTRUCTOR'S NOTE:** Rate the student on the following criteria. Spreading the manure where instructed, safe driving to, during, and from operation is crucial. Complete dumping of the spreader must be evaluated. Therefore the following criteria shall be scored.

CRITERIA	RATING				
1) Safe/correct attachment	NE	1	2	3	4
2) Correct driving to area	NE	1	2	3	4
3) Safe operation	NE	1	2	3	4
4) Spreader completely emptied	NE	1	2	3	4
5) Correct return to complex	NE	1	2	3	4
6) Safe/correct detachment	NE	1	2	3	4

INSTRUCTOR'S COMMENTS: _____

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PERFORMANCE TEST – GENERAL RANCH WORK

DRIVING THE LOADER TRACTOR – John Deere 5105 with 521 Loader

STUDENT'S NAME _____DATE_____

INSTRUCTOR'S NAME _____ATT. NO. _____

OBJECTIVE: Given the loader tractor, bucket, and hay fork the student will be able to safely drive it, identify forward and reverse gears, check appropriate fluid levels, and operate the loader lift and bucket tilt.

STUDENT INSTRUCTIONS: The use of a front end loader tractor on ranches can make difficult jobs easy and more efficient. However operational safety is paramount for not only the driver but also for the facility, co-workers, and surrounding equine. As per the video, "Tractor Accidents, It's Not Going to Happen to Me", understanding the physics behind the use of a loader and how it affects the tractor is crucial in avoiding critical accidents and rollovers. It therefore is important that you not only have a working knowledge of driving but also use of the loader joystick and movement with additional weight. Another part of your evaluation is to change the bucket out to bale spears and visa versa. Realize that your field of vision is also compromised with using the loader. One rule of loader operation which always bears repeating, **NEVER EVER OPERATE THE TRACTOR WITH THE LOADER ABOVE THE TRACTOR'S CENTER OF GRAVITY.** Several things can happen with the loader in this position, none good. You will be using the loader tractor for moving and feeding round bales, not handling the 3 X 3 alfalfa bales. This performance test is a prerequisite for the performance test, "Feeding a Round Bale". You will be given a demonstration and practice with an instructor is a must prior to operation/testing. When you are ready, your performance is to be evaluated. Familiarize yourself with the rating scale. Now follow these steps:

1) View the tractor safety video. _____
2) Pass the written tractor loader safety test with 100% accuracy. _____
3) Acquire the tractor, when not in use, and a **rag (used for checking oil).**
4) Notify your instructor when you are ready to begin.
5) Follow the instructor's commands and answer their questions.
6) As soon as you have completed this test, your performance will be graded.

PROCESS EVALUATION

Rate the student's ability to perform each of the following steps:

TASK	RATING				
1) Check fluids (hydraulic, diesel, Radiator, engine oil))	0	1	2	3	4
2) Check tires	0	1	2	3	4
3) ID forward gears	0	1	2	3	4
4) ID reverse gears	0	1	2	3	4
5) Locate clutch	0	1	2	3	4
6) Locate brakes	0	1	2	3	4
7) Locate parking brake	0	1	2	3	4
8) Locate PTO lever	0	1	2	3	4
9) Locate hand throttle	0	1	2	3	4
10) Locate foot throttle	0	1	2	3	4
11) Locate hydraulic lever	0	1	2	3	4
12) Locate fuel gauge and identify fuel level	0	1	2	3	4
13) Identify joystick	0	1	2	3	4
a) Joystick direction for up/down	0	1	2	3	4
b) Joystick direction for tilting	0	1	2	3	4
14) AVERAGE SCORE (Total/13)	0	1	2	3	4

INSTRUCTOR'S COMMENTS:_____

_____

PRODUCT EVALUATION

Rate the student on the following criteria. Major emphasis should be placed upon safety when handling a round bale and using the loader. The wrong direction when tilting the bucket and/or operating the lift arms will result in an automatic 60% score.

CRITERIA	RATING				
1) Start tractor	0	1	2	3	4
2) Raise and lower 3 point hookup	0	1	2	3	4
3) Raise/lower loader arms	0	1	2	3	4
4) Tilt bucket/spear down	0	1	2	3	4

5) Tilt bucket/spear up 0 1 2 3 4
6) Lower loader arms 0 1 2 3 4

-Attachment/Detachment-

7) Lower arms almost to ground 0 1 2 3 4

8) Line up with hay fork attachment 0 1 2 3 4

9) Tilt bucket downward to attach, but do not have so low as to allow attachment to "dig into" ground 0 1 2 3 4

10) Lift bucket with hay fork 0 1 2 3 4

11) Tilt bucket up for final attachment 0 1 2 3 4

12) Attach linch pins (L & R) 0 1 2 3 4

13) Back up with loader attachment off ground 0 1 2 3 4

14) Using 3 point bale lift, center and back up to round bale 0 1 2 3 4
15) Lift round bale with 3-pt 0 1 2 3 4
16) Approach round bale with center spear lined up with center of r. bale 0 1 2 3 4

16) As entering bale, slightly angle spear downward 0 1 2 3 4

17) Pick up bale and move to instructor designated drop off 0 1 2 3 4
18) Lower bale and back up 0 1 2 3 4
19) Lower 3 pt lift and set bale down 0 1 2 3 4
20) Detach linch pins 0 1 2 3 4
21) Tilt attachment downward until downward but do not have so low as to allow it to "dig into" ground 0 1 2 3 4
22) Return tractor to parking area and

	shut off	0	1	2	3	4
23)	**AVERAGE SCORE (Total/19)**	0	1	2	3	4

INSTRUCTOR'S COMMENTS:_____

_____

_____

PERFORMANCE TEST – GENERAL RANCH WORK

DRIVING THE LOADER TRACTOR – John Deere 5105 with 521 Loader

STUDENT'S NAME _____DATE_____

INSTRUCTOR'S NAME _____ATT. NO. _____

OBJECTIVE: Given the loader tractor, bucket, and hay fork the student will be able to safely drive it, identify forward and reverse gears, check appropriate fluid levels, and operate the loader lift and bucket tilt.

STUDENT INSTRUCTIONS: The use of a front end loader tractor on ranches can make difficult jobs easy and more efficient. However operational safety is paramount for not only the driver but also for the facility, co-workers, and surrounding equine. As per the video, "Tractor Accidents, It's Not Going to Happen to Me", understanding the physics behind the use of a loader and how it affects the tractor is crucial in avoiding critical accidents and rollovers. It therefore is important that you not only have a working knowledge of driving but also use of the loader joystick and movement with additional weight. Another part of your evaluation is to change the bucket out to bale spears and visa versa. Realize that your field of vision is also compromised with using the loader. One rule of loader operation which always bears repeating, **NEVER EVER OPERATE THE TRACTOR WITH THE LOADER ABOVE THE TRACTOR'S CENTER OF GRAVITY.** Several things can happen with the loader in this position, none good. You will be using the loader tractor for moving and feeding round bales, not handling the 3 X 3 alfalfa bales. This performance test is a prerequisite for the performance test, "Feeding a Round Bale". You will be given a demonstration and practice with an instructor is a must prior to operation/testing. When you are ready, your performance is to be evaluated. Familiarize yourself with the rating scale. Now follow these steps:

1) View the tractor safety video. _____
2) Pass the written tractor loader safety test with 100% accuracy. _____
3) Acquire the tractor, when not in use, and a **rag (used for checking oil).**
4) Notify your instructor when you are ready to begin.
5) Follow the instructor's commands and answer their questions.
6) As soon as you have completed this test, your performance will be graded.

PROCESS EVALUATION

Rate the student's ability to perform each of the following steps:

TASK	RATING				
1) Check fluids (hydraulic, diesel, Radiator, engine oil))	0	1	2	3	4
2) Check tires	0	1	2	3	4
3) ID forward gears	0	1	2	3	4
4) ID reverse gears	0	1	2	3	4
5) Locate clutch	0	1	2	3	4
6) Locate brakes	0	1	2	3	4
7) Locate parking brake	0	1	2	3	4
8) Locate PTO lever	0	1	2	3	4
9) Locate hand throttle	0	1	2	3	4
10) Locate foot throttle	0	1	2	3	4
11) Locate hydraulic lever	0	1	2	3	4
12) Locate fuel gauge and identify fuel level	0	1	2	3	4
13) Identify joystick	0	1	2	3	4
c) Joystick direction for up/down	0	1	2	3	4
d) Joystick direction for tilting	0	1	2	3	4
14) AVERAGE SCORE (Total/13)	0	1	2	3	4

INSTRUCTOR'S COMMENTS:_____

_____

PRODUCT EVALUATION

Rate the student on the following criteria. Major emphasis should be placed upon safety when handling a round bale and using the loader. The wrong direction when tilting the bucket and/or operating the lift arms will result in an automatic 60% score.

CRITERIA	RATING				
1) Start tractor	0	1	2	3	4
2) Raise and lower 3 point hookup	0	1	2	3	4
3) Raise/lower loader arms	0	1	2	3	4
4) Tilt bucket/spear down	0	1	2	3	4

5)	Tilt bucket/spear up	0	1	2	3	4
6)	Lower loader arms	0	1	2	3	4

-Detachment/attachment-

7)	Detach linch pins (l & r)	0	1	2	3	4
8)	Lower arms almost to ground	0	1	2	3	4

9)	Tilt bucket downward to detach, but do not have so low as to allow attachment to "dig into" ground	0	1	2	3	4
10)	Back up with loader attachment off ground	0	1	2	3	4
11)	Line up with hay fork attachment	0	1	2	3	4
12)	Lift bucket with hay fork	0	1	2	3	4
13)	Tilt bucket up for final attachment	0	1	2	3	4
14)	Attach linch pins (l & R)	0	1	2	3	4
15)	Approach round bale with center spear lined up with center of r. bale	0	1	2	3	4
24)	As entering bale, slightly angle spear downward	0	1	2	3	4
25)	Pick up bale and move to instructor designated drop off	0	1	2	3	4
26)	Lower bale and back up	0	1	2	3	4
27)	Return tractor to parking area and shut off	0	1	2	3	4
28)	**AVERAGE SCORE (Total/19)**	0	1	2	3	4

INSTRUCTOR'S COMMENTS:_____

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PERFORMANCE TEST GENERAL RANCH WORK

USING BALE FORKS AND FEEDING A ROUND BALE

STUDENT'S NAME_____ DATE_____

INSTRUCTOR'S NAME_____ ATPT #_____

OBJECTIVE: Given the tractor, round bale forks, scissors/pocket knife, and a round bale, the student will be able to correctly and safely attach the round bale forks, employ the round bale, negotiate the tractor and round bale to the pasture/paddocks, feed the round bale, and disconnect the forks following the steps given in lecture and instructor demonstration.

STUDENT INSTRUCTIONS: One of the basic tasks performed routinely on any livestock operation is the use of the "3 point" round bale feeder, either spear or fork type. Due to the high costs of feed and handling of hay, round bales and large square bales have become the feeding practice of choice for pastured horses and cattle. Not only is correct attachment, operation, and detachment crucial, but also handling the tractor and bale forks around livestock to prevent injury is critical. Placement of the round bale in order to most effectively utilize all the hay possible is also important. The hay should be placed far from any fence to ward off the dominant horse from "pushing" another through the fence, never in a low spot to collect potential rainwater, or in an area in which rotted hay is located. The bale wrap must be completely removed so as a horse does not ingest the plastic. Also, when cutting the bale wrap make sure to avoid injury with the scissors or pocket knife. Always be aware of the location of any horses during the time you are removing the wrap. Remember the potential for injury with the bale mover empty and the forks up. The prerequisites for this test are as follows:

1) Passing the tractor safety test with 100% accuracy.

2) Passing the performance test "Driving the Tractor" with at least 80% accuracy.

3) Observe the instructor demonstration on attachment, employment, and detachment of the bale fork.

Practice is a key to correct operation. Practice this procedure and when you are ready have the instructor grade you on your performance. Familiarize yourself with the rating scale. Now follow these steps:

1) Obtain the tractor with turnbuckle and location of the bale forks.

2) Notify your instructor when you are ready to begin.

3) As soon as you have completed this test, notify your instructor so that your performance may be graded.

PROCESS EVALUATION **INSTRUCTOR'S NOTE:** Using the lecture and demonstration as a guide, determine this student's ability to operate the bale forks. Be sure to check the following criteria using the rating scale below.

4=Skilled, can perform task with no supervision

3=Skilled, but requires supervision

2=Semiskilled, but requires close supervision

1=Unable to perform task

NE=No exposure to this skill

Rate the student's ability to perform each of the following steps:

	TASK	RATING				
	ATTACHMENT					
1)	Obtained equipment	NE	1	2	3	4
2)	Backed tractor (R-1) close to bale forks	NE	1	2	3	4
3)	Removed kingpins from form forks	NE	1	2	3	4
4)	Placed two point arms in correct fork areas	NE	1	2	3	4
5)	"Pinned" in arms	NE	1	2	3	4
6)	Attached turnbuckle to tractor	NE	1	2	3	4
	EMPLOYMENT					
7)	Lifted forks	NE	1	2	3	4
8)	Drove to round bale cache (H-1)	NE	1	2	3	4
9)	Backed up to and centered tractor on round bale	NE	1	2	3	4
10)	Lowered forks	NE	1	2	3	4
11)	Stopped when round bale at frame of forks	NE	1	2	3	4
12)	Picked up round bale	NE	1	2	3	4
13)	Drove to appropriate feeding area (L-4)	NE	1	2	3	4
14)	Cut wrap low	NE	1	2	3	4
15)	Lowered bale	NE	1	2	3	4
16)	Drove forward leaving forks down	NE	1	2	3	4
17)	Removed all of wrap	NE	1	2	3	4
18)	Lifted forks	NE	1	2	3	4
19)	Drove back to equine complex (H-1)	NE	1	2	3	4
	DETACHMENT					
20)	Lowered bale fork in storage area	NE	1	2	3	4
21)	Disconnected turnbuckle	NE	1	2	3	4
22)	Unhooked kingpins from 2 point arms	NE	1	2	3	4
23)	Parked tractor and correctly shut off	NE	1	2	3	4
24)	AVERAGE SCORE	NE	1	2	3	4

INSTRUCTOR'S COMMENTS:_____

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PRODUCT EVALUATION **INSTRUCTOR'S NOTE:** Rate the student on the following criteria. Correct attachment, safe driving to, during, and from, and correct detachment. Also total removal of wrap and correct placement of round bale.

	CRITERIA	RATING				
1)	Safe attachment	NE	1	2	3	4
2)	Correct driving to bale cache	NE	1	2	3	4
3)	Safe operation	NE	1	2	3	4
4)	Correct placement of round bale	NE	1	2	3	4
5)	Complete removal of wrap	NE	1	2	3	4
6)	Correct driving back to equine complex	NE	1	2	3	4
7)	Safe detachment	NE	1	2	3	4
8)	AVERAGE SCORE	NE	1	2	3	4

INSTRUCTOR'S COMMENTS:_____

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PERFORMANCE TEST – TRACTOR

DRIVING THE TRACTOR - John Deere 2155

STUDENT'S NAME _____DATE _____

INSTRUCTOR'S NAME _____ATTEMPT NO. _____

OBJECTIVE: Given the tractor the student will be able to safely drive it, engage the PTO shaft, identify forward and reverse gears, check appropriate fluid levels, and hook up to the manure spreader.

STUDENT INSTRUCTIONS: One job preformed by varied personnel in the horse industry is the operation of tractors. Personal safety is of the utmost importance. Along with an understanding of proper maintenance and correct driving procedures, the student must use appropriate methods while driving around the horses and always yield to the horses. You must first view the tractor safety video, "Tractor Accidents, It's Not Going to Happen to Me", and pass the written tractor safety test with 100% accuracy. You have been practicing and familiarizing yourself with the tractor and now your performance is to be evaluated. Familiarize yourself with the rating scale. Now follow these steps:

1) View the tractor safety video. _____

2) Pass the written tractor safety test with 100% accuracy. _____

3) Acquire the tractor, when not in use, and a **rag (used for checking oil).**

4) Notify your instructor when you are ready to begin.

5) Follow the instructor's commands and answer his questions.

6) As soon as you have completed this test your performance will be graded.

PROCESS EVALUATION

Rate the student's ability to perform each of the following steps:

	TASK	RATING				
1)	Check fluids, (hydraulic, diesel, radiator, engine oil)	0	1	2	3	4
2)	Check tires	0	1	2	3	4

Cont.

3)	ID forward gears	0	1	2	3	4
4)	ID reverse gears	0	1	2	3	4
5)	Locate clutch	0	1	2	3	4
6)	Locate brakes	0	1	2	3	4
7)	Locate parking brake	0	1	2	3	4
8)	Locate PTO lever	0	1	2	3	4
9)	ID correct PTO setting	0	1	2	3	4
10)	Locate hand throttle	0	1	2	3	4
11)	Locate foot throttle	0	1	2	3	4
12)	Locate hydraulic lever	0	1	2	3	4
13)	Locate fuel shut off knob	0	1	2	3	4
14)	Are brakes locked or unlocked?	0				4
15)	Locate fuel gauge and identify how diesel is present	0	1	2	3	4
16)	AVERAGE SCORE	0	1	2	3	4

INSTRUCTOR'S COMMENTS: _____

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PRODUCT EVALUATION

Rate the student on the following criteria. The evaluation should be based with major emphasis on safety. Score accordingly with regard to driving ability.

	CRITERIA	RATING				
1)	Start tractor	0	1	2	3	4
2)	Release parking brake	0	1	2	3	4
3)	Raise and lower 3-point hookup	0	1	2	3	4
4)	Drive forward in 2nd gear (L2)	0	1	2	3	4
5)	Drive forward in 5th gear (H5)	0	1	2	3	4
6)	Drive through pylons (L4)	0	1	2	3	4
7)	Back through pylons (L3)	0	1	2	3	4
8)	Drive a figure "8" around pylons	0	1	2	3	4
9)	Back a figure "8" around pylons	0	1	2	3	4
10)	Back up to manure spreader (R1)	0	1	2	3	4
11)	Stop when able to drop pin into drawbar and tongue	0	1	2	3	4
12)	Place gears into neutral position	0	1	2	3	4
13)	Engage parking brake	0	1	2	3	4
14)	Shut off engine	0	1	2	3	4
15)	Switched off key	0	1	2	3	4
16)	AVERAGE SCORE	0	1	2	3	4

INSTRUCTOR'S COMMENTS: _____

_____

_____

_____

Information Sheet on the

2155 John Deere Tractor

The tractor is indispensable on horse farms. It is very important in the day to day operation of a ranch/farm. But in the wrong hands it can be dangerous. The tractor is used for many differing purposes at MATC. There are various operational systems which we use daily. Through this information sheet you will learn about safe use of the tractor, what systems will be used with what implements, troubleshooting, and some on the maintenance.

1) **Normal maintenance/Pre-operation**.

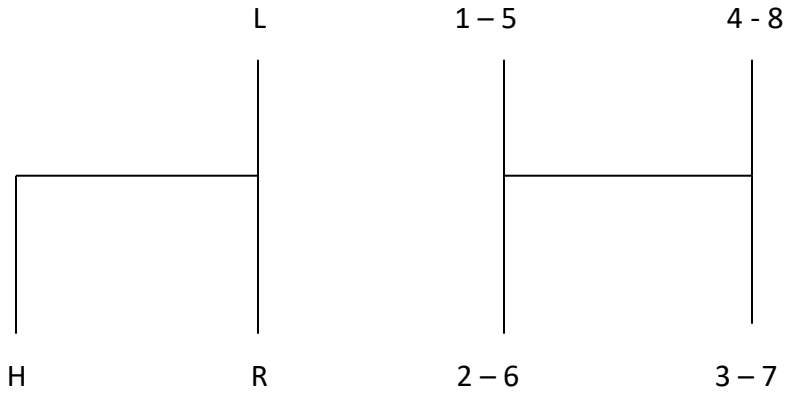
- NEVER, NEVER let the tractor run out of diesel. It is extremely hard to start once it has run out and may require mechanic work to restart.
- NEVER fill a diesel with gasoline. Some tractors run on gas. If gas is added to a diesel engine it may ruin the engine.
- Check the oil level. This is a simple task that, if left unchecked, can lead to destruction of the engine. The dipstick is located on the right side of the engine.
- Check the hydraulic fluid level. Located behind the seat is a very long dipstick which verifies the level of hydraulic fluid. This fluid is critical for operation of the tractors three point and implements.
- Check the tires. Make sure there is adequate inflation in all four tires.
- Know where the coolant is filled. Again, if left without antifreeze/coolant major damage can result if the tractor gets too hot.
- Understand the gauges. Problems can be easily avoided if you recognize the status of the gauges.

2) **Identification**.

- Clutch on left. The clutch is depressed with your left foot. This is what allows you to shift up or down a gear in order to increase or decrease ground travel. Unlike a standard transmission on an auto, you do not need to use the throttle to engage motion.
- Brakes on right. There are two brake petals located on the right side of the platform. One controls the left rear wheel and the

other controls the right. Both brakes should always be locked together unless you are told otherwise by an instructor.

- Foot throttle below brakes. There is a foot throttle that is used just the way it is used in vehicles.
- Hand throttle on instrument panel right of steering wheel. This throttle is used when engine speed needs to be maintained at a constant rate.
- Fuel shut off knob. By pulling this knob straight up it will kill the engine. However, always remember when shutting the tractor off that you must also shut off the key.
- Gear shifters. When sitting on the tractor the **two** shifters are located between your knees. The transmission of this tractor has a "split transmission" or a "high/low" shift (left) and also gears 1-8 (right). This allows the tractor to be very powerful on the low side and also will add speed on the high side. With the tractor running, these shifters will only be operational when the clutch is depressed and **both** shifters are in position. Remember the fastest gear setting we use is H5.



"high/low split" forward gears

- Guages. Located on the instrument panel are various gauges that you will need to identify. The fuel gauge, park brake warning, oil light warning, speedometer, hourmeter, and tachometer will be used by the operator.
- Emergency brake. Located on the left of the driver, to engage, depress button with thumb and pull upwards. To disengage, depress button with thumb and lower. Always disengage prior to driving.

- Drawbar. When pulling a trailer type implement (spreader), the tongue of the implement is pulled from the drawbar located behind the tractor. Hitchpins are used to hook the implement to the tractor.

3) **Driving**.

- Starting. Have gear shifters in the neutral position, depress clutch, turn on key.
- Movement. Depending upon direction (forward or reverse) you will need to shift the "high/low" shifter and then the gear of choice (fastest gear used is H5). Make sure the parking brake is disengaged. Slowly let out on clutch, do not jerk with your left foot or the tractor will jump. If right foot is also on brakes, release brakes prior to release of clutch. If you have driven any standard transmission you may want to use the foot throttle, do not do this with the tractor as it is geared to be powerful and there is no need to depress the foot throttle. Once the clutch is released it will go on its own.
- Stopping. When stopping, engage clutch first then brakes. Do not reverse these steps. If brakes are depressed first the engine will still be driving the rear wheels. By depressing the clutch first it will disengage the engine from driving the rear end.
- Engine turn off. When you are ready to shut down the tractor, located to the right of the steering wheel on the dash is the fuel shut off knob. By pulling straight up it will starve the engine of fuel and turn it off. Remember to also shut off the electrical supply by turning off the key. If this is not done the battery will drain and the tractor will need to have its battery recharged. Once the engine is off, shift the gears into neutral and engage the parking brake.

4) **Systems**.

- Power Take Off (PTO) System. This system allows for turning a driveline to supply rotary movement. Examples are; turning the beaters on the spreader, turning the blades on a brush hog, turning the auger on the post hole auger, etc… The lever for the PTO is located down and to the left of the driver. To engage the PTO shaft, the clutch must be depressed. However, to disengage the PTO shaft the clutch does not have to be depressed. The PTO

shaft should **NEVER** be on unless operating/running an implement.

- 3 Point System. Located to the rear of the tractor are two arms that are located on either side of the drawbar. A third member, the turnbuckle, is located above the PTO shaft which forms the third part of the three point. This system is used to raise and lower implements. Examples are; round bale platform and brush hog. Hydraulic fluid from the rear end is what accentuates its movement. The lever to raise and lower the 3 point is located to the right and slightly forward of the driver. Pulling back raises and pushing down lowers. The 3 point may be slow to lower if there is no attachment (weight). If not in use the 3 point should always be at its highest elevation.
- Hydraulic System. Located to the right and slightly behind the driver is the lever that controls the hydraulics. This system is based upon high pressure fluids that accentuate a mechanism (ex. cylinder). High pressure hoses are used in the case of the spreader to operate the apron. These hoses are connected into fittings at the back of the tractor. Before these hoses are unhooked, the hydraulic lever needs to be used to release the pressure off of the lines. Otherwise upon reconnecting there will be pressure on the hoses to the extent that you will not be able to reconnect the lines to the tractor.

In concluding, the tractor is not unlike any automobile, in order to be safe driving it or operating implements you must understand what is involved in its operation. After you have taken the safety test on tractor driving and scored 100% you will be allowed to practice driving until you feel you are ready to take the Driving the Tractor performance test.

Information Sheet on the

Manure Spreader

The manure spreader is an implement that uses both hydraulic pressure and engine revolutions in order to operate. Safety is of vital concern for operator, bystanders, and horses. By following the safety rules below accidents will be prevented. Once you pass the safety test with 100% accuracy you may take the performance test, "Operating the Manure Spreader".

1) **Keep shields in place**

   Shields are for your protection. Do not operate spreader without shields in place. Rotating parts can crush or dismember causing death or personal injury.

2) **Protect Bystanders**

   Never operate the spreader near people. Do not place rocks, timbers, or other solid objects in the spreader. Objects can be thrown great distances causing injury to people and horses.

3) **Operate Spreader Safely**

   Rotating parts can entangle or strike people. Never enter a spreader while in motion. Operate the spreader from the tractor seat only. If you must get off the tractor shut off the hydraulics and PTO. Reduce speed when turning or traveling on rough terrain. Avoid traveling over loose rocks, ditches, or holes.

4) **Park spreader safely**

   Park spreader on a level surface. Secure jackstand with pin.

5) **Keep riders off machine**

   Keep riders off. Riders are subject to injury such as being struck by foreign objects and being thrown off the machine.

6) **Stay clear of rotating drivelines**

   Entanglement in rotating driveline can cause serious injury or death. Keep tractor shield and driveline shields in place at all times. Make sure rotating shields turn freely. Wear loose fitting clothing. Stop the engine and be sure PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

7) **Stay clear of rotating beater**

Rotating beater can entangle or strike causing death or personal injury. Do not clean out or service spreader while beater is rotating.

8) **Reduce speed when towing loads**

Braking to stop towed loads from transport speeds can cause the towed load to swerve and upset.

Recommended speed-weight ratio

Maximum speed is 20 mph when towing loads equal to or less than the tractor

Reduce speed to 10 mph when towing load more than double the tractor weight

Do not tow loads exceeding double the tractors weight

9) **Avoid high-pressure fluids**

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before unhooking hydraulic lines. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. If any fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type of injury or gangrene may result.

Attaching the Manure Spreader

1) Back up to and line up holes of drawbar and tongue.

2) Place in neutral and engage parking brake or place transmission in gear and shut off engine.

3) Attach spreader to tractor with hitch pin.

4) Remove pin and jackstand to stored position.

5) Wrap chain around handle and secure stand with pin.

6) Rotate driveline or tractor PTO to align splines.

7) Slide collar back and bell forward to engage driveline yoke with tractor PTO.

8) Pull collar back to lock driveline yoke in position.

9) Connect hoses to tractor. If not possible, check if pressure is on lines by depressing the end of the connection. Connect bottom first.

Operating the Manure Spreader

1) Drive to selected dump area.

2) Place transmission in L3, leaving clutch depressed.

3) With clutch depressed, engage PTO lever.

4) Let out clutch slightly and observe for PTO engagement and beater operation.

5) With driveline rotating, slowly release clutch.

6) Increase engine speed (using hand throttle) to "**PTO rated**".

7) Engage hydraulic lever to operate apron.

8) Watch for movement of manure from front of spreader.

9) Once beaters no longer kicking out manure, with left hand on PTO lever and right hand on steering wheel, disengage PTO lever.

10) When apron completely clean, disengage hydraulic lever.

Detaching the Manure Spreader

1) Shut off tractor, leave in gear, and engage parking brake. (making sure spreader and tractor are on level ground)

2) Detach driveline by pulling collar back and sliding driveline off tractors PTO.

3) Engage and disengage hydraulic lever to release pressure on hydraulic lines.

4) Disconnect lines, bottom first.

5) Store lines off ground on elevated stand.

6) Remove jackstand pin, pivot jackstand to lift position and replace pin.

7) Relieve weight from tractor drawbar.

8) Remove hitch pin.

2nd Year
TRACTOR SAFETY TEST

Prior to taking this test you must have had a tractor demonstration given by your instructor and viewed the "Tractor Safety Video". You must pass this test with 100% accuracy before you can take the performance test, "Driving The Tractor". On the performance test, "Driving The Tractor" you will be allowed to practice with an instructor. However, you must pass this test with at least an 80% until you will be allowed to drive it on your own. You may be able to practice and retake it until you receive at least an 80%. You also will be able to retake this written test until you pass with 100% of the questions answered correctly.

I. Matching. Using a no. 2 lead pencil, mark the correct response on the scantron card by using **A, B, C, D,** or **E.** Answers will be used more than once.

A) left
B) right
C) front
D) back
E) none of the above.

1) The PTO lever is located on the ___?___ side of the tractor.

2) The 3-point lever is located on the ___?___ side of the tractor.

3) The hydraulic dipstick is located on the ___?___ side of the tractor.

4) The oil dipstick is located on the ___?___ side of the tractor.

5) The fill spout for the hydraulic fluid is located on the ___?___ side of the tractor.

6) The fill spout for the engine oil is located on the ___?___ side of the tractor.

7) The clutch is located on the ___?___side of the tractor.

8) The foot brakes are located on the ___?___ side of the tractor.

9) The emergency brake is located on the ___?___ side of the tractor.

10) The hydraulic lever is located on the ___?___ side of the tractor.

II. Multiple Choice. Mark the correct response by using **A, B, C, D,** or **E.**

11) To shut off the tractor one uses the:

A) brakes.
B) ignition key.
C) hydraulic knob.
D) fuel shut off knob.
E) clutch.

12) The fastest gear we use around the barns is:

A) 2nd.
B) 3rd.
C) 4th.
D) 5th.
E) 6th.

13) The brush hog is used to:

A) level the manure in the paddocks.
B) permeate the soil.
C) spray herbicide.
D) mow pasture and paddock.
E) work the arena.

14) Which is the correct statement?

A) The tractor is easily started once it runs out of fuel.
B) The correct fuel to use is gasoline.
C) The appropriate fuel to use is diesel.
D) The dipstick will tell you how full the fuel tank is.
E) Fuel goes in the spout with the black cap.

15) If you drive carefully, how many passengers will the tractor handle?

A) 0
B) 1
C) 2
D) 3
E) 4

16) According to the tractor safety video, most tractor fatalities are caused by:

A) people being run over.
B) the PTO shaft.
C) people being caught between the tractor and implements.
D) fuel explosions.
E) tractor rollovers.

17) At how many rpm's should the brush hog and manure spreader be operated?

A) 2200
B) 2300
C) 2400
D) 2500
E) 2600

18) On the manure spreader, the beaters are operated by the ___?___ and the apron by the ___?___.

A) hydraulics, PTO
B) PTO, hydraulics
C) hydraulics, hydraulics
D) PTO, PTO
E) none of the above

19) Most all tractors are:

A) top heavy.
B) bottom heavy.
C) heavier to the right.
D) heavier to the left.
E) equally balanced.

20) When going up an incline:

A) proceed on normally.
B) drive at an angle on the slope.
C) increase your speed and drive straight up.
D) back straight up the slope.
E) back up at an angle to the slope.

21) Prior to starting the tractor one should:

A) adjust the seat so that it is comfortable.
B) put the transmission in gear.
C) check the fluid levels.
D) turn on the PTO shaft.
E) raise the 3 point.

22) PTO stands for:

A) Performance Torque Operation.
B) Power Take Off.
C) Power Turn On.
D) Performance Tractor Orientation.
E) none of the above.

23) The box blade is used to:

A) fertilize pastures.
B) move round bales.
C) carry feed.
D) work the arena
E) level and scrape dirt.

24) When pulling with a chain:

A) the chain may be tied off wherever handy.
B) wrap the chain around the axle.
C) wrap the chain around the front end.
D) tie off to the drawbar.
E) tie it to the 3-point arms.

25) When dumping the manure spreader:

A) the fastest gear we use is 3rd.
B) turn on the beaters prior to the apron.
C) do not turn on the hydraulics until the tractor is started forward.
D) all of the above.
E) none of the above.

26) If the PTO is engaged, by letting the clutch out approximately 1", the PTO will start without the tractor moving forward.

A) True
B) False

27) When hooking up the manure spreader, what is the first part that is hooked up?

A) hydraulics.
B) PTO.
C) tongue.
D) jack stand.
E) none of the above.

28) The disc is used to:

A) permeate the soil.
B) scrape and level dirt.
C) dump manure.
D) fertilize pastures.
E) work the arena.

29) The primary purpose of the 3-point hookup is to:

A) run rotary equipment.
B) use oil pressure to operate equipment.
C) raise and lower implements.
D) all the above.
E) none of the above.

30) If you notice an oil/hydraulic/water leak, you should:

A) notify your instructors.
B) fill with the appropriate fluid and proceed on.
C) proceed on as normal.
D) drive it to the diesel shop.
E) notify the maintenance staff.

Appendix F: DEI workshop handouts

Vocabulary of DEI

Reference: https://environment.uw.edu/about/diversity-equity-inclusion/tools-and-additional-resources/glossary-dei-concepts/#:~:text=It%20broadly%20includes%20race%2C%20ethnicity,status%2C%20physical%20appearance%2C%20etc.

Ally- Someone who supports a group other than their own, someone who actively works to reduce their own complicity and bias.

Bias- Prejudice resulting from a need to quickly classify individuals based on categories.

BIPoC- Black, Indigenous, and People of Color, based on the recognition of collective experiences of systemic racism.

Calling In- Taking someone aside to discuss and educate them about their problematic behavior by explaining their misstep and working with them in a patient and compassionate way to prompt them to change their behavior. This can be useful when there is an existing relationship, or when calling out would be unsafe for the victim, bystander, or ally. This approach can allow for dialog, growth, or learning without creating public shame or embarrassment. However, it does not necessarily stop the behavior while in progress or demonstrate public support for the target. Calling out can be a useful tool when used by a member of a privileged group to challenge problematic beliefs or actions of others who share that privilege.

Calling Out- Drawing critical attention to someone's unacceptable actions or behavior. This can be uncomfortable but is appropriate and necessary when words or actions are actively hurting someone. This is a step that actively shows support and allyship to targeted individuals and groups. This also may be necessary to break the momentum or redirect a discussion, or to set boundaries about behavior and words that will not be tolerated in a given setting.

Color Blind- The belief that we should treat people equally without acknowledging differences. The belief that everyone is the same regardless of race/ethnicity.

Cultural Appropriation- The misappropriation of cultural elements for profit, without understanding the value of these elements in the context of the original culture.

Diversity- A wide range of identities, ideas, perspectives, and values.

Discrimination- Conscious or unconcious unequal treatment of members of different groups, favoring one group over others based on differences in race, gender, economic class, sexual orientation, physical ability, religion, language, age, national identity, religion, and other categories.

Equity- Identifying and removing participation barriers. Actively acknowledging historically underserved and underrepresented populations.

Explicit Bias- Individuals are aware of their bias. An example is overt racism; it can also include positive preferences for a particular group.

Historically Marginalized Community- Groups and communities that have experienced racism, discrimination, and exclusion due to unequal power balances.

Implicit Bias- The negative associations that people express automatically and unknowingly which affect their actions and decisions.

Inclusion- Actively creating an environment where members of all groups are welcome and supported, acknowledging and respecting differences.

Intentional Acts- An action that is purposeful. Purposely creating a welcoming and supportive environment.

Institutional Oppression- Systemic mistreatment of people based on their membership in a group.

Harassment- Comments or actions that are perceived as offensive and unwelcome.

Justice- Actively dismantling barriers to resources that HMC have had limited access to, such that these people can be full and respected participants in society.

Microaggressions- Verbal, nonverbal, and environmental actions that intentionally or unintentionally communicate hostile or unwelcome messages to people of a different group.

Multicultural Competency- Embracing diversity and learning about other cultures, respecting differences and being willing to learn from other cultures.

Privilege- When access to materials or resources is restricted to the dominant social group.

Race- A social construct that people use to categorize each other.

Safe Space- An environment where everyone feels safe and comfortable to learn and participate without being judged or discriminated against.

Systemic Oppression- Unequal treatment of different groups due to the way society is constructed, organized discrimination and exploitation.

Tokenism- Superficial acts meant to display a desire to be inclusive, but without intention to back them up.

Whiteness- Societal constructs that have promoted white people as the dominant social group and then enable white people to have greater access to resources.

Personal reflection worksheet

These questions are for your own personal use. You may share them only if you would like to do.

1. Identify one explicit bias you believe you hold.

2. Contemplate what implicit biases you might also hold.

3. Identify inequities that take place in your workplace- can be for any group (race, ability, sexual orientation, etc.)

4. What is something intentional you can do (however small you feel this act to be) during the coming year to pull at the threads of systemic oppression to promote equity, multicultural competence, and justice?

5. Identify an action that NAEAA can take to help support and educate the membership. We would like to plan quarterly virtual events.