



# Goat Newsletter

Cooperative Extension Program  
School of Agriculture and Applied Sciences  
Langston University

*The Newsletter of the E (Kika) de la Garza American Institute for Goat Research*

*Winter 2017*

## From the Director's Desk



Winter is a busy time of the year for us. While our extension activities wind down, we still have ongoing research projects and the ever-present end-of-year reports.

Recently, Dr. **Shirron LeShure** departed and has embarked upon a new endeavour. Dr. **LeShure** worked with Dr. **Art Goetsch** on his Sustainable Control of Greenhouse Gas Emission by Ruminant Livestock project and with Dr. **Terry Gipson** on his Enhancing Wellbeing and Productivity of Dairy Goats Using Smart Technology project. Both projects were funded by USDA 1890 Capacity Building Grant program. During her time at

Langston, Dr. **LeShure** was very busy and productive.

Another departure was Dr. **Haiying Liu**, who returned to Shenyang Agricultural University in China. Dr. **Liu** spent a 12-month sabbatical at Langston University under the tutelage of Dr. **Art Goetsch**. Dr. **Liu** investigated the effects of condensed tannins on ruminal methane emission, energy metabolism, and growth in growing Alpine doelings. We will miss both Drs. **LeShure** and **Liu**.

At the same time as Dr. **Liu's** departure, Dr. **Qunhui Yang** joined us to work with Dr. **Zaisen Wang** in the area of nutritional manipulation of immunology in parasite-infected goats. Like Dr. **Liu**, Dr. **Yang** is an associate professor in the College of Animal Science and Veterinary Science at Shenyang Agricultural University of China and is on a one-year sabbatical.

Generally at this time of year, we are busy planning extension activities for the new year. However, there are extension activities that transcend the calendar and one of those is our website. I am very happy to announce that

we have a brand new website. We have long had a presence on the internet and have endeavoured to deliver timely and scientific information to our stakeholders. About two years ago, we embarked upon the task of completely renovating our internet presence. The impetus being a desire to give our clientele an enjoyable browsing experience, to update the server infrastructure, and also to conform to university branding criteria. Our old server was outdated and so we purchased a newer, faster, and larger capacity server. The old server was built upon an individual html page structure, which became cumbersome as the amount of content grew. A content management system (CMS) is easier to deploy and can ensure uniformity across the website. We chose Drupal for our CMS. Once Drupal was installed on the new server, the porting of content from the old server was a monumental task. Static pages are easy to transfer but time-consuming. Dynamic pages are much more difficult to transfer. The first dynamic pages to be transferred were the Goat Nutrient Calculators (<http://goats.langston.edu/>



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*Nutrient-Calculators*). Many months of troubleshooting were needed to ensure that the javascript performed correctly. The greater task was the transfer of the online meat goat certification program. We realized that a CMS is not suited for instructional purposes and we needed a learning management system (LMS). A very popular and robust open-source LMS is Moodle; therefore, we installed and configured Moodle on our new server. Afterwards, we needed to restructure and revise the content for the meat goat certification course. Additionally, Dr. **Roger Merkel** had been awarded funding from the USDA-NIFA Capacity Building program to develop an online dairy goat certification program. Therefore, instructional content for the dairy goat certification course needed to be created and uploaded. Thankfully, the nearly Sisyphean task of deploying a new server with new content has been accomplished and we are pleased to share it with you. You can read more about the dairy and meat goat certification program on page 4 of this newsletter.

Internationally, we have not been very active lately. However, recently Drs. **Terry Gipson** and **Erick Loetz** have been awarded a USDA-Foreign Agriculture Service Scientific Cooperation Research Program grant to work with Egerton University in Kenya. From 2012 to 2014, Langston University was involved in a project to enhance capacity for research, teaching, technology transfer, and community

development programs with Egerton University. In addition, in 2014 Drs. **Brigit Muasa** and **Chrilukovian Wasike** of Kenya spent three months at Langston University as USDA Borlaug Fellows. This new USAD-FAS-SCRIP grant will build upon those two former programs. The main goal of this new project is to develop a simplified technique for artificial insemination, which would allow farmers to easily inseminate their females and to genetically improve their herds/flocks with minimal costs, inputs, and technical skills. This simplified technique has the potential to impact millions of small ruminant producers and their families worldwide because more productive small ruminant herd/flock equates to more animal-source products such as meat, milk, or cheese for the household and a steadier generator of income.

All in all, it has been a good year for us and **I wish you and your goats a happy and prosperous 2018!!**





# OK Commissioner of Ag Visits Langston U.

In November, the Oklahoma Commissioner of Agriculture, Mr. Jim Reese, and a team from the Oklahoma Department of Agriculture Food and Forestry (ODAFF) visited Langston University. Commissioner Reese also serves on the Oklahoma State



*Commissioner Jim Reese (left), Bryan Painter (right), and Jamey Allen (foreground) enjoy goat cheese and crackers.*

University A&M Board of Regents, which is the governing board for Connors State College, Langston University, Northeastern Oklahoma A&M College, Oklahoma Panhandle State University, and Oklahoma State University. Therefore, Commissioner Reese comes to Langston University at least once a year for the annual visit/meeting of the Board of Regents and knows the University well. He has also participated in past Goat Field Days. Nonetheless, it was a pleasure for the School of Agriculture and Applied Sciences (SAAS) to host Commissioner Reese and his ODAFF team. Dr. Wesley Whittaker, Dean of SAAS, greeted the ODAFF team and accompanied

them as they visited Dr. Kent Smith, Jr., President of Langston University, and his administrative team. While in the E.L. Holloway Agricultural Research, Education and Extension Center, Commissioner Reese and the ODAFF team received overviews on Family and Consumer Sciences, Agriculture and Natural Resources, and the American Institute for Goat Research. Following the overviews, Commis-



*Tanna Kilpatrick, Commissioner Jim Reese, and Jamey Allen tour the research facilities.*

sioner Reese and the ODAFF team took a laboratory tour and then a farm tour of the newly constructed Small Ruminant Education, Research, and Extension Facility. We hope that Commissioner Reese and the ODAFF team enjoyed their visit and will visit us again soon.



*Left to right: Betty Thompson, Deputy Commissioner of Agriculture; Melody Afill, Marketing Coordinator for Ag in the Classroom and Farm to School program; Meriruth Cohenour, Agritourism Coordinator; Raquel Vasconcelos Lourençon, Langston University; Jamey Allen, Director of Market Development Staff; Jim Reese, Commissioner of Agriculture; Wesley Whittaker, Dean, School of Agriculture and Applied Sciences; Tilahun Sahlu, Langston University; Terry Gipson, Langston University; Tanna Kilpatrick, Director of Laboratory Services; Tandy Kidd, Marketing Coordinator for Farmers Markets and Oklahoma State Fair Store programs; Bryan Painter, Communications/Administrative Director (photographer, not shown)*

# Dairy and Meat Goat Online Certification

Langston University has recently launched an online certification program for dairy goat producers and updated and relaunched its popular online certification program for meat goat producers.

New goat producers, as well as some established producers, have expressed a need for current, correct information on how to raise goats and produce safe, wholesome products in demand by the public. Information is needed in all areas, from basic housing and management to nutrition, herd health, reproductive issues, marketing, product safety, and value-added products.

Many producers obtain information from the World Wide Web. While proper, science-based information does exist on the internet, producers with little to no livestock experience have no background to discern "good" versus "bad" information. In some cases, information posted could be harmful to animals and to the economic viability of goat enterprises. As the goat industry grows and evolves, a quality assurance program, that is compatible with HACCP-like programs, is essential. Such a program ensures the production of a safe, healthy product that satisfies consumers and increases profit for the production industry. The objectives of this certification website are:

1. to provide reliable educational information incorporating a Quality Assurance Program that is suitable for dairy and meat goat producers, county agents and other agriculture professionals and
2. to provide testing methodologies allowing for certification of dairy and meat goat production for those producers desiring certification.

The web-based training and certification program for dairy goat producers was developed with funding from USDA/NIFA project #OKLXMERKEL11 entitled "Extension Education Delivery Tools for Dairy Goat Producers: a Web-based Certification Program and E-book" and the web-based training and certification program for meat goat producers was developed with funding from USDA/FSIS/OPHS project #FSIS-C-10-2004 entitled "Development of a Web-based Training and Certification Program for Meat Goat Producers."

## How to Enroll in the Online Certifications

The new server for Langston University Agriculture Research and Cooperative Extension can be found at <http://goat.langston.edu> or <http://goats.langston.edu>. Scrolling down the home page, you will find three tiles labeled ACTIVITIES, LIBRARY, and TRAINING. If you click on the TRAINING tile, you will be taken

to the Training page in Figure 1. Alternatively, you can click on the TRAINING menu item at the top of the home page. In addition to being the gateway to the online certification courses, this page serves as the gateway to our Nutrient Requirement Calculators page, where you will find links to the Technical Version Calculator and the Producer Version Calculator. The Training page also gives access to the Goat Quiz, where you can test your knowledge on goat facts. If you click on the Online Certifications tile, you will arrive at the online certification page (Figure 2). The certification home page showcases the various dairy and meat goat Quality Producer icons that will be awarded

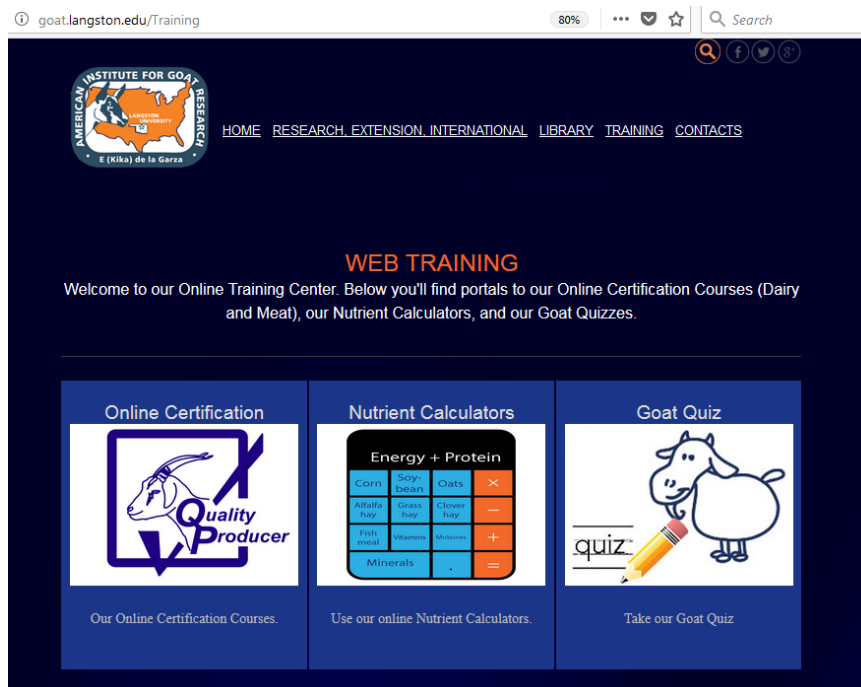


Figure 1. Web Training home page.





Figure 2. Certifications home page.

certification program affiliation can be found. By clicking on the orange button that is approximately  $\frac{3}{4}$  of the way down the page, you will be taken to the courses home page (Figure 3). Alternatively, you can type <http://certification.goats.langston.edu> into the address bar at the top of your browser and you will be taken there directly. You should bookmark the courses page so that you can easily return to it. The certification courses have been constructed in Moodle, which is a Learning Management System (LMS). Moodle is a free Open Source LMS designed to help educators create effective online courses. If you have had no experience with

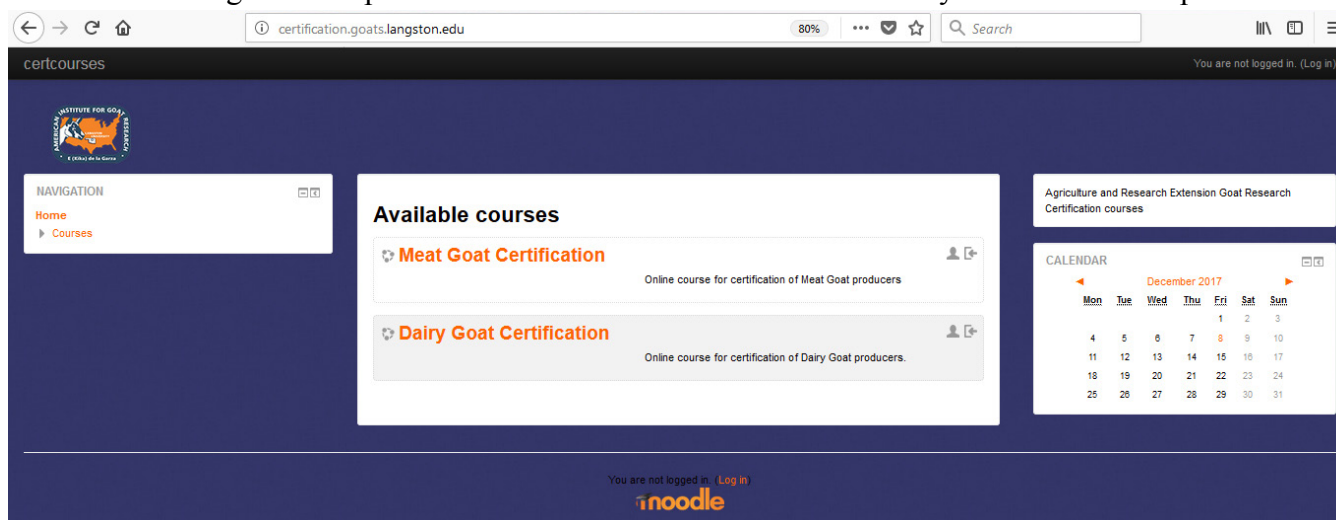


Figure 3. Initial courses home page.

an LMS or specifically Moodle, the learning curve is easy and the interface is intuitive. If this is your first time to visit the courses page, you will be asked to create an account (Figure 4) and subsequently to verify your email account. The email verification is to confirm your identity and to receive enrollment information and course updates. If you are a returning user, you will simply log in with the credentials that you used to establish your account. You only have to register once to have access to both the dairy and meat goat certification courses. Once you have logged in, you can click "Site home" on the Navigation panel to see your available courses (Figure 5), which looks similar to Figure 3 except now you are logged into the site. When you click on either the Dairy Goat Certification or the Meat Goat Certification link, you will be taken to the

to participants who successfully complete the certification process. In addition, links listing the modules of the Dairy and Meat Goat Producer Certification Courses are provided. To qualify as a Quality Dairy Producer or Quality Meat Producer, you must successfully complete all of the 18 core modules and 7 of the 10 elective modules of the dairy goat certification all of the 21 core modules and 9 of the 12 elective modules of the meat goat certification, respectively. Further down the page, you will find a link to see enrollees who have received certification. On that page, certified producers are organized alphabetically by name. Tables detailing geographical association or

cont. next page.

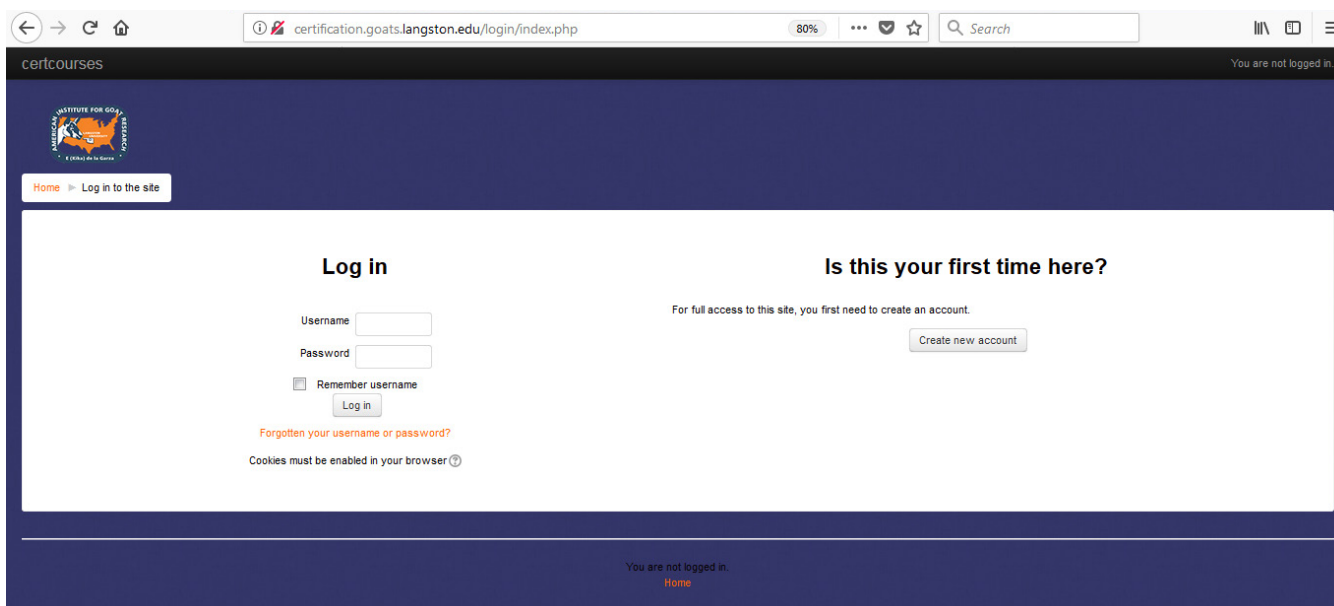


Figure 4. Create an account or log into your existing account.

individual course content page (Figure 6), which will display the course modules. However, you are not yet enrolled in the course and will not have access to the modules. You will need to click on the "Enrol me in this course" link in the Administration panel. Enrollment is a **free** and simple self-enrollment process and you should receive an email confirming enrollment. On the course content page, each link corresponds to a specific instructional module, either core and elective. Core modules are required for certification. There are 18 core modules for the dairy goat certification and 21 core modules for the meat goat certification. Not all elective modules are required for certification; however, 7 of the 10 elective modules for dairy goat certification and 9 of the 12 elective modules for meat goat certification are required in order to receive

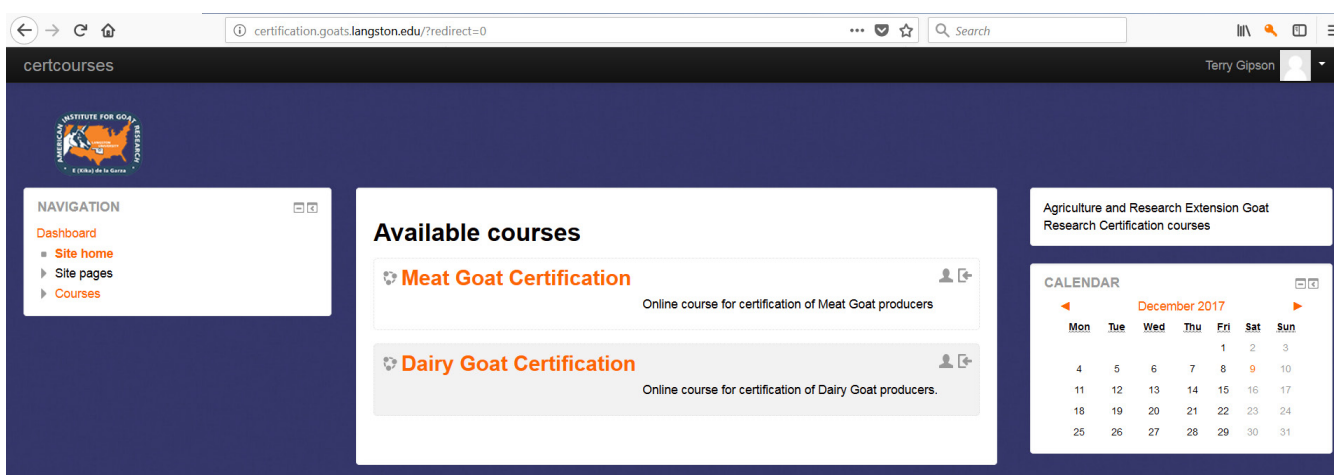


Figure 5. View of courses home page after log in.

Quality Dairy Producer or Quality Meat Producer certifications. The combination of elective modules is your choice. Valuable information is in each and every elective module. When you click on a module link, you will be taken to the pre-test for that module. This pre-test measures your knowledge of the module instructional content before you have access to the module content; in other words, it measure your current state of knowledge. That particular module pre-test is only offered once during the certification process. Once you have taken the pre-test, you will be allowed access to the instructional module content, which is in pdf format and can be downloaded. If you score 85% or greater on the pre-test, you have sufficient grasp of the subject matter for that module, the instructional objectives of that module have been met, and you will not be required to take a post-test. Regardless of the pre-test score, you will now have access to

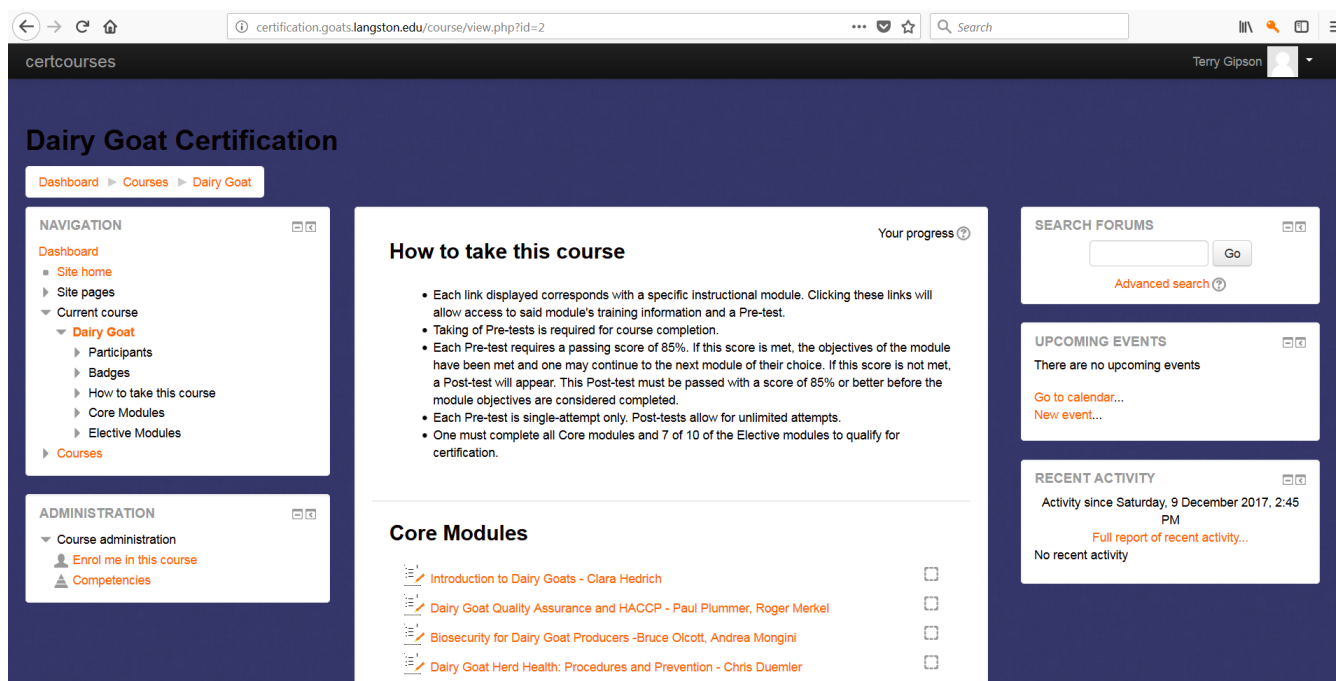


Figure 6. View of Dairy Goat Certification home page.

the module and can study the module content. If your pre-test score was less than 85%, then a post-test score of 85% or greater will be required to meet the instructional objectives of that module. The post-test may be taken as many times as needed to achieve a score of 85% or greater.

In Figure 7, you can see the red  $\times$  to the right of the Introduction to Dairy Goats - Clara Hedrick module, by the way, Clara Hedrick is the author of that module. The red  $\times$  means that the participant did not score

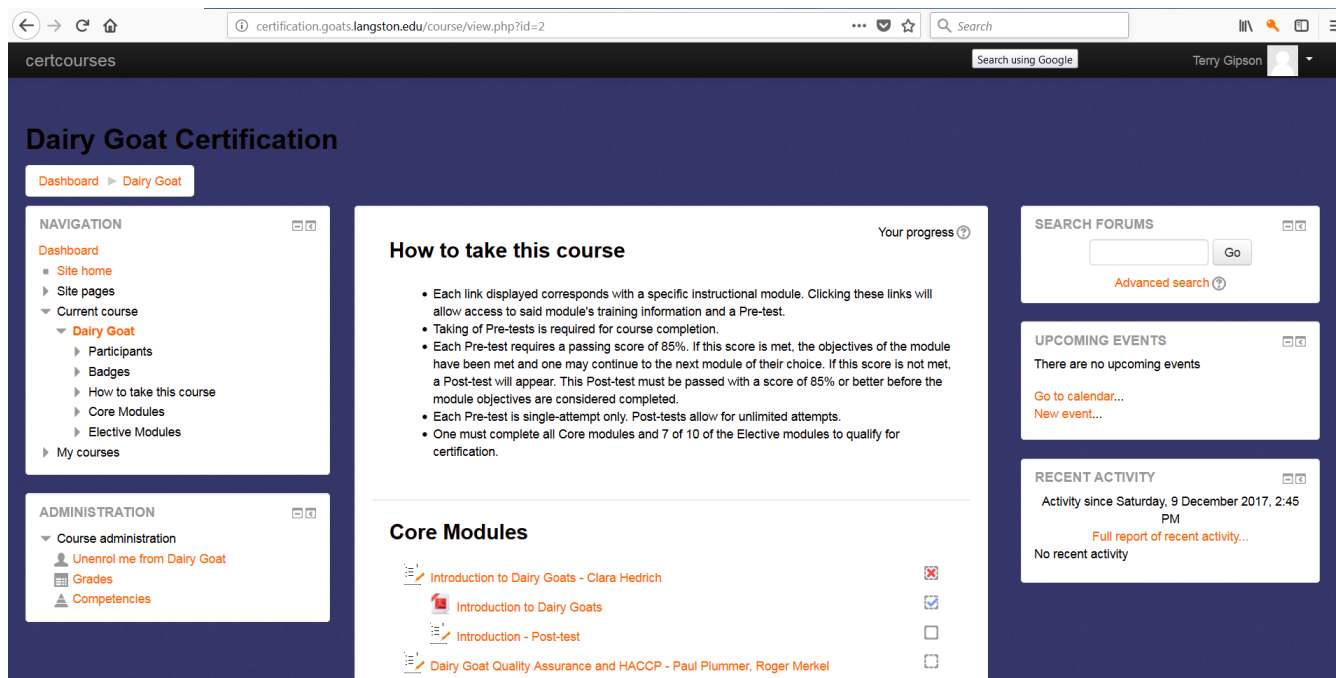


Figure 7. View of Dairy Goat Certification home page with progress.

an 85% or greater on the pre-test; therefore, taking of the post-test is required to fulfill the instructional objectives of that module. The blue check mark to the right of the module title means that the participant has accessed the module content. You can track your progress by clicking on "Grades" in the Administration panel. Upon successful completion of the core and elective modules, you will receive an email detailing the final steps in the certification process, which will include the option to purchase a paper certificate.



## Dairy and Meat Goat Quality Producer Online Certification Course

see page 4

<http://goats.langston.edu/Online Certification>

<http://certification.goats.langston.edu>



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