

## Fall 2013: Community and Technical College-level Bioenergy program launches!

The Agriculture Center of Excellence is part of a multi-disciplinary team for the Advanced Hardwood Biofuels Northwest initiative, led by the University of Washington and funded through the US Department of Agriculture's National Institute of Food and Agriculture. The Agriculture Center of Excellence's objectives for AHB are to establish a Bioenergy program based at Walla Walla Community College, develop core courses offered through eLearning, and collaborate to offer the Bioenergy pathways and courses in coordination with interested Community and Technical Colleges in Washington and the Northwest.

Throughout the next year, the Agriculture Center of Excellence will work with interested Community and Technical Colleges (CTCs) and industry partners, to build collaborations focused on offering the on-line Bioenergy courses and hands-on lab intensives regionally. Through these partnerships, AHB and the Agriculture Center of Excellence seek to reach a wider audience of students to prepare the technical workforce in Bioenergy needed throughout the Northwest.

AHB's Community and Technical College-level Bioenergy program is geared for workers employed by, and students new to, the biofuels, chemical, food, pulp, agriculture, and water processing industries. The Bioenergy program provides formal training in safety, electricity, process controls, biofuels, the sciences,



and operations. Graduates will have transferable skills that enable them to work safely and effectively as Operators and Technicians at facilities which convert biomass feedstock into: Transportation fuels, Biomethane, Combined Heat and Power, Food grade oils, Fermented foods and beverages, Industrial chemicals, Soil amendments, and other high value commodities.

The Agriculture Center of Excellence is excited to launch Advanced Hardwood Biofuels Northwest's Bioenergy Operations program this September through Walla Walla

Community College! The first course in the sequence offered Fall Quarter 2013 is an "Introduction to Bioenergy" followed by Biorefinery Processes in Winter Quarter 2014 and Biorefinery Equipment in Spring Quarter 2014. Second Year courses include: Biorefinery Operations, Bio-Chemical Conversion, Biomass Feedstock Management, and Thermo-Chemical Conversion. Following the Introduction to Bioenergy, subsequent courses will include hands-on labs via weekend "lab intensive" commitments (up to two per course).

All seven new Bioenergy courses will be offered on campus and on-line for those that prefer the distance learning option (i.e. eLearning), especially workers already employed in the industry with Continuing Education interests or requirements – AND -- students working through aligned Community and Technical College programs. Supporting courses draw from existing programs in Energy Systems, Water Management, Agriculture, Chemistry, Biology, and Engineering.

Over this past summer, the seven new Bioenergy courses were developed by an incredibly knowledgeable team including representatives and input from: Walla Walla Community College, Washington State University, Bioproducts Science and Engineering Lab (WSU Tri-Cities), Pacific Ethanol, ZeaChem, Greenwood Resources, College of Southern Idaho, University of Washington, Oregon State University,

University of Idaho, Roseburg Forest Products, University of Minnesota, University of California-Davis, Imperium Renewables, AgEnergy, AMATROL, and many more. AHB and the Agriculture Center of Excellence are very fortunate to have had such reliable and informed support to enhance course development efforts. Over the next 12 months, the Agriculture Center of Excellence will pilot, refine, and further prepare all seven Bioenergy courses while securing transfer degree articulation agreements with regional universities –AND-- collaboration agreements with interested Community and Technical Colleges.

In addition to our work to develop the new courses, through recent approvals by the Washington State Board for Community and Technical Colleges, the Agriculture Center of Excellence has worked with Walla Walla Community College to add new pathways to the Bioenergy program: 1) Associate in Applied Arts and Sciences Degree in Bioenergy Operations; 2) one-year Certificate in Bioenergy Operations; 3) Bioenergy Short Certificate series (geared for workers already employed in the industry – and-- students in aligned Community and Technical College programs); 4) Certificate in Biomass Feedstock Management; and 5) an in-development Associate in Applied Science transfer degree (AAS-T) articulated with regional universities. Regardless of the pathway taken, the Bioenergy program's graduates will be instrumental in helping the country move to cleaner, more efficient, and sustainable energy options!

Please note that the program was just approved for Financial Aid and Worker Retraining support. Scholarships are available! Join us by calling (509) 527-3678, email [jason.selwitz@wwcc.edu](mailto:jason.selwitz@wwcc.edu) -- or visit our website at: [www.wwcc.edu/bioenergy](http://www.wwcc.edu/bioenergy)