SECTION HEADING

RNEW 1195: Biodiesel Technologies and Regulatory Issues

Description

Biodiesel Technologies and Regulatory Issues investigates the underlying research and reaction processes that are used to produce biodiesel. Studying feedstock options coupled with past and present technologies provides foundational knowledge about the industry. The course includes an in-depth review of the ASTM Standard for biodiesel and the regulatory issues that can arise from non-compliance.

Credits

2

Prerequisite

None

Corequisite

None

Topics to be Covered

1. The legal definition of biodiesel that is recognized by the United States versus other countries.

- 2. Past, present, and emerging technologies associated with the biodiesel industry.
- 3. ASTM D6751, The Standard for Biodiesel.
- 4. The role of the National Biodiesel Board.
- 5. The social, economic, and environmental impact of off-specification biodiesel in the marketplace.
- 6. National trends and outlook for the biodiesel industry.
- 7. Global trends and outlook for the biodiesel industry.
- 8. Current and historical events regarding the biodiesel industry.

Learning Outcomes

- 1. Discuss past, present and emerging technologies for biodiesel production.
- 2. Discuss ASTM D6751 and all of the associated standards that are used to qualify fuel specifications.
- 3. Advocate for the quality control of biodiesel in a positive manner.
- 4. Describe the chemical reactions that support successful biodiesel processing.
- 5. Identify feedstock, production and storage issues that can relate to production quality.

Credit Details

Lecture: 2

Lab: 0

OJT: 0

MnTC Goal Area(s): None