

Oral Presentations - Fremont and Southwest Rooms

Fremont Room

ME Moderator: Dr. Heidi Feigenbaum

8:30am - Flagstaff Renewable Fuels: Biodiesel Processor Design

Students: Matt Amanti, Brent Baker, Amanda Hook
Sponsor: Ed Smith, Flagstaff Renewable Fuels

9:00am - Joy Cone Co. Automation

Students: Matthew Flippen, Jennifer Marstanovic, Ricardo Silva, Jaclyn Stevens
Sponsor: Curtis Estevo, Joy Cone Co.

EE Moderator: Dr. Allison Kipple

10:00am - Reconfigurable Computing Card (RCC)

Students: Karl Groll, Andrew Petaisto, Steve Walker, Barry Wutzke
Sponsor: Monica Calcott, SEAKR Engineering, Inc.

10:30am - A Phase Locked Loop Using an FPGA for Client Wulfsberg Electronics

Students: Timothy Cochran, Ronald Hill, Triston McLean, Garrett Rude, Xiangmiao Yuan
Sponsor: Bob DeLong, Wulfsberg Electronics

11:00am - Grand Canyon River Outfitters Association Alternative Raft Propulsion System Design

Students: Michael Bartelt, Tamarah Binek, Evan Horton, Sarah Politsch, Sherman Seschillie, Forrest Schwyn
Sponsor: Grand Canyon River Outfitters Association

Lunch Break

ME Moderator: Mr. Bryan Cooperrider

1:00pm - Piston Powered Recharging Mechanism for Portable Irrigation Systems

Students: JeanPaul Bell, Jon Heitzinger, Dustin Stone, Brett Wham
Sponsor: Kevin Irwin, Rain Bird

1:30pm - SAE Aero Design 2009

Students: Nick Bruno, Kevin Cluff, Joe Davidson, Joel Dugdale, Sean Varga
Sponsor: John Tester, SAE International, Nestle Purina, UniSource Energy

2:00pm - Baja SAE, Off Road Vehicle

Students: Chris Minchuk, Karl Schultz, Andy Winegarner
Sponsor: Tanya Gallagher, Society of Automotive Engineers

ME Moderator: Dr. Tom Acker

3:00pm - Mechatronic Catheter Handle for W.L. Gore & Associates

Students: Murray Andress, Tony DiSanto, Ian Hamilton, Jill Urban
Sponsor: Jason Alger and Brandon Short, W.L. Gore & Associates, Inc.

3:30pm - Edwards Air Force Base Thrust Reverser

Students: Ryan Adams, Cole Johnson, Robert Walish III, Brent Warren
Sponsor: Mark Curley, Edwards Air Force Base Avionics Lab

Southwest Room

EE Moderator: Mr. John Sharber

8:30 am - Improving Efficiency of the Turnbull

Students: Fiifi Blankson, Harlan Greeley, Shweta Seth
Sponsor: David Scott, Joy Cone Company

9:00am - A Real-Time GPS Tracking System

Students: Eric Hammerstrom, Cannelton Howard, Brian Vincent
Sponsor: Raytheon

CS Moderator: Dr. John Georgas

10:00am - Hanlinberg: An Open-Source eInk Project

Students: Sean Black, Ben Liszewski, Steve Worsley
Sponsor: Brent Gorda, Lawrence Livermore National Laboratory

10:30am - Quantifier Web Portal

Students: Joshua Chapman, Noah Hilt, Steven Koechle
Sponsor:

11:00 am - A System for Game Based Language Learning

Students: Dean Dobransky, Joe Flieger, Travis Hudson, Richard Lester
Sponsor:

Lunch Break

CENE Moderator: Dr. Paul Gremillion

1:00pm - Miller Creek Floodplain Revision; Crossing Conceptual Design

Students: Mike Carrol, Gordon Hastings, Brian Kunk
Sponsor: Greg Toth, City of Prescott

1:30pm - Structural Design for the Construction Management Teaching Facility

Students: Ashley Wilson, Cheryl Woodlock, Cordell Yazzie, Karlis B. Yazzie
Sponsor: John Tingerthal, NAU CM Department

2:00pm - 2009 NAU ASCE Concrete Canoe

Students: Ashley Bibeau, Steven Rowson, Vanessa Smith, Tauras Stockus
Sponsor: Arizona Engineering Company

CENE Moderator: Dr. Bridget Bero

3:00pm - Munds Canyon Wash Pedestrian Bridge Design for Munds Park, Arizona

Students: Cash Burger, Ryan Emerick, Andrew Sayer
Sponsor: ?

3:30pm - Methods of Improving Biodiesel Viscosity with Changing Temperature and Time

Students: Osita Eluemuno Onyejekwe, Jarrod Yazzie
Sponsor: Edward Smith, Flagstaff Renewable Fuels

Oral Presentations - Meadows Room

Landscape Preservation and Restoration by Jake Bastine

Meadows Room

CENE Moderator: Dr. Paul Trotta

8:30am - Flagstaff Renewable Fuels Waste Wash Water Treatment (FRF W³T)

Students: Kimberly Cook, Sanjuana Rico, Matt Roberts Alysha Silva

Sponsor: Edward Smith, Flagstaff Renewable Fuels

9:00am - Policarpo Wastewater Treatment Design

Students: Laura Langdon, Stephanie Lindstrom

Michael Martuscello, David McDonald

Sponsor: McDonald Family, Living Water 4 Roatan

CENE Moderator: Dr. Edward Smaglik

10:00am - Cosnino Rd. and Pinto Dr. Intersection Roundabout Design

Students: William Faber, Nicholas Fiala, Emily Lukasik

Sponsor: Dale Wegner, Coconino County Public Works Department

10:30am - 2008-2009 ASCE Student Steel Bridge

Students: Sam Heffelfinger, Thomas Nelson, Sean Strain

Sponsor: Jay Allen, Schuff Steel

11:00am - NAU Parking Structure Site Planning and Site Design

Students: Benjamin Annen, Erik Hornaday

Sponsor: David Hook, NAU

Break

Environmental Sciences

Moderator: Dr. Scott Anderson

1:00pm - *Opening Remarks, by Scott Anderson*

1:05pm - The Flagstaff Green Map by Jessica Makowske

1:17pm - Indigenous Community Sustainability on the Colorado Plateau by Michael Schwartz

1:29pm - Reevaluating Community Progress by Chloe Bovoletis

1:41pm - Recycling on the NAU Campus by Betsy Goodman

1:53pm - The Yellow Bike Program on the NAU Campus by Jacob Slade

2:05pm - A Field Season with the US Forest Service as a Rangeland Management Technician by Gayle Gratop

2:17pm - Carnivore Monitoring Program, Sierra National Forest, California by Jason Huyck

Break

Moderator: Dr. Scott Anderson

3:05pm - Biogenic Silica Analysis on Bear Lake as a Quantitative Method to Examine Past Climate by Kevin Rice

3:17pm - Impacts of Human Recreation on Fecal Coliform Counts and Microbial Community Composition in Fossil Creek, Arizona by Brandie Lambdin

3:29pm - Attitudinal Perspectives on Secondary Reuse Water by Amber Lidell

3:41pm - The Effect of Tree Genetics on Decomposer Food Webs by Luke Hanna

3:53pm - Ectomycorrhizal Density in Differing Piñon Pine Mortality Sites in Northern Arizona by Melanie Mauller

4:05pm - An Internship with Sustainable Waves by Benjamin Britton

4:17pm - The Methods and Effectiveness of Recycling at NAU by Eric Leifer

4:29pm - The Diablo Trust Social Survey by Kevin Weismann

4:41pm - *Concluding Remarks, by Scott Anderson*