

The official e-communication  
for Colorado MESA

# eNews



Welcome to the September 2008 - Volume 3, Edition 2 of the Colorado MESA e-News electronic newsletter. Please let us know how we can assist your MESA program and make a positive difference for our MESA students. For more information on any item

mentioned in the newsletter, please contact our office at 303.352.3869 or via email at [ColoradoMESA@ucdenver.edu](mailto:ColoradoMESA@ucdenver.edu). In this edition, you'll find information on MARK 2008, STEMpalooza and much more. To view past newsletters or print a pdf version of the current issue, visit [www.cmesa.org/news/e-news.html](http://www.cmesa.org/news/e-news.html)



## MARK 2008 Professional Development Training

Thank you to all who attended the annual MESA Advisors Retreat and Kick Off (MARK) Professional Development Training on September 11<sup>th</sup> and 12<sup>th</sup>. The event was a huge success with over 75 advisors from around the state attending event at Xilinx and the University of Colorado at Boulder. This year's MARK event highlighted a number of hands-on activities and general resources available for advisors including:

- *Multi-Task Trebuchet Challenge*  
To assist advisor with the design and construction of the trebuchet, we have developed an in-depth trebuchet curriculum to accompany the competition rules and guidelines. Included in the curriculum is an overview of the physics of the trebuchet.
- *MESA USA Windmill Design Challenge*  
Renewable energy project on how to construct a multi-purpose windmill, which is the next MESA USA Design Challenge in 2009-10.
- *Roller Coaster Run Design Challenge*  
Advisors will be introduced to the math and science components behind a roller coaster.
- *Soil Analysis*

To download a complete curriculum and handouts, [click here >>](#). For more information, please contact Colorado MESA at 303.352.3869.

## MESA Program Tips

Recruitment and retention of students is crucial to the success of the MESA program. It is important for MESA advisors to understand that many ethnic minority students respond differently to outreach and recruitment. Simply announcing the MESA meeting time and location is not a sufficient recruitment effort. Successful minority recruitment means that additional forms of outreach must be undertaken. Below is a suggested timeline for recruitment:

*September 2008*

Organize the first MESA student meeting and select the meeting times and places for the remainder of the semester.

Submit your Advisor Information Sheet to the statewide MESA office.

*October 2008*

**October 10 – Deadline to submit [Student Enrollment Forms \(SEF\)](#)**

## High School Fall Fling

Thursday, November 6<sup>th</sup> and Friday, November 7<sup>th</sup>  
University of Colorado at Boulder

Registration Opens October 2, 2008

Register Online at [www.cmesa.org](http://www.cmesa.org)

This two-day event brings over 250 high school students from nearly 30 Colorado MESA high schools around the state to the University of Colorado at Boulder campus to compete in two separate engineering team challenges: the 2008-09 MESA USA National Multi-Task Trebuchet Design Challenge and a Boat Building Design Challenge.

Scheduled for Thursday, November 6th and Friday, November 7th, 2008 and Co-Sponsored by the University of Colorado at Boulder Multicultural Engineering Program (MEP), the event will offer a valuable experience for your MESA students to work in teams applying their engineering skills to challenge other MESA students from around the state.

Once again, thank you for your continued support of Colorado MESA and we look forward to seeing you in November.



## STEMapalooza – Field Trip Opportunity



Colorado MESA will showcase our MESA program and schools at the first annual STEMMapalooza on October 24 & 25, 2008. STEMMapalooza is a two-day event that features exhibitors from around the state of Colorado that support STEM programs for students and educators and employ hundreds of thousands of jobs in STEM related careers. The **goal of STEMMapalooza** is to bring industry, educational institutions, students and organizations

together to:

- Create urgency and enthusiasm about the need for continuous and rigorous STEM education focused on the needs of the economy
- Develop awareness of opportunities in STEM education in Colorado
- Engage policy makers and the media in the STEM conversation
- Develop networks and partnerships among STEM providers
- Connect employers and job seekers with the thousands of available jobs/internships/externships that utilize STEM education and skills
- Highlight successes and generate a forum for sharing STEM practices across stakeholder groups
- Take responsibility for improving competitiveness in the international arena of STEM education.

Field opportunities are available and appropriate for upper elementary, middle school, and high school students. This event provides an amazing venue for students to foster the desire to learn more about careers in STEM, extracurricular programs, support Colorado MESA, and simply, how the world works.

For more information, visit [www.stemapalooza.org](http://www.stemapalooza.org).

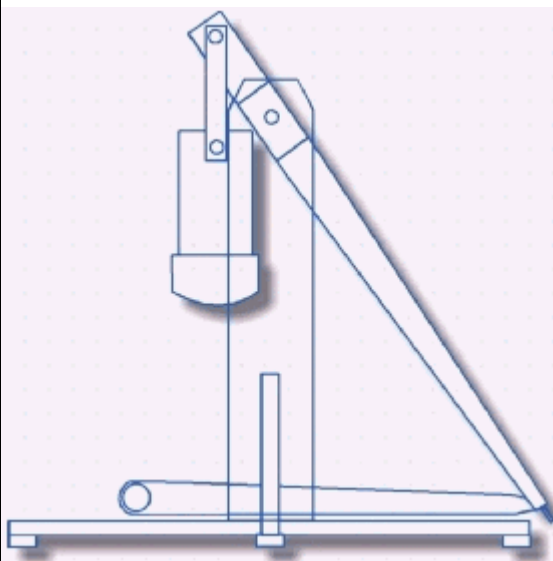
## MESA Advisor Spotlight

### Advisor Kevin Lindauer, John F. Kennedy HS

Colorado MESA would like to congratulate MESA Advisor Kevin Lindauer from John F. Kennedy High School in Denver for receiving the Colorado Science Teachers Association 2008 Outstanding Biology Teacher Award. The National Association of Biology Teachers (NABT), in conjunction with Prentice Hall and the Colorado Biology Teachers Association (CBTA) identifies outstanding biology teachers in all 50 states, Wash. D.C. and Puerto Rico, Canadian provinces, & overseas territories. Teachers who teach the majority of their classes in the life sciences in grades 7-12 in public or private schools are eligible. Colorado honorees are selected by actual classroom visitations & observations. Congratulations Kevin Lindauer!

## MESA USA National Design Challenge

### Multi-Task Trebuchet



MESA USA presents its national engineering design competition specifications for the 2008-2009 year. The Multi-Task Trebuchet event involves the transfer of energy from the counterweight to the projectile being thrown. **The maximum amount of energy available to complete the tasks will be limited to that stored by raising the counterweight.** Colorado high school and middle school teams will compete in the following four components in order to qualify for nationals:

1. Performance
2. Technical Paper
3. Academic Display
4. Oral Presentation

Please note the following areas in the revised 2007/08 rules and guidelines:

- Projectiles
- Academic Display
- Oral Presentation
- Device Inspection Criteria

The high school qualify event is schedule for **November 6 & 7, 2008** at the annual **Fall Fling Event** at the University of Colorado at Boulder. For more information or questions, please email us at [coloradoMESA@cudenver.edu](mailto:coloradoMESA@cudenver.edu).

## **Colorado FIRST Robotics 2009**

FIRST (For Inspiration and Recognition of Science and Technology) was founded by inventor Dean Kamen to inspire an appreciation of science and technology in young people. FIRST's Vision is to positively transform culture by inspiring young people, their schools, and communities to appreciate science and technology. FIRST brings together schools with businesses, and students with professionals as mentors, all with the support of local universities. For more information, visit Colorado First Robotics at [www.coloradofirst.org](http://www.coloradofirst.org).



### ***Programs***

- The [FIRST Robotics Competition](#) (FRC) is an exciting, multinational competition that teams professionals and young people to solve an engineering design problem in an intense and competitive way. The program is a life-changing, career-molding experience—and a lot of fun.
- The [FIRST Tech™ Challenge](#) (FTC) is a mid-level robotics competition principally for high-school-aged students. It offers the traditional challenge of a FIRST competition but with a more accessible and affordable robotics kit.
- For 9-14 year-olds, there is [FIRST LEGO League](#). The FIRST LEGO League (FLL), considered the "little league" of the FIRST Robotics Competition, is the result of a partnership between FIRST and the LEGO Company. FLL extends the FIRST concept of inspiring and celebrating science and technology to children usually aged 9 through 14, using real-world context and hands-on experimentation.
- [Junior FIRST LEGO League](#) (JFLL) offers an exciting opportunity for younger budding scientists will introduce the core concepts of all FIRST programs to inspire, excite, and introduce children to the wonders of science, technology, and engineering.

### ***First Robotics Competition Scholarship Available***

The application for NASA sponsorship for the 2008-2009 *FIRST* Robotics Competition season is now open. To access the application, please read the application directions carefully and then follow the instructions for registration. Apply online at <https://frc-grants.arc.nasa.gov/directions.php>

## **UPCOMING EVENTS**

☐ [STEMapalooza](#)  
October 24 & 25, 2008  
Colorado Convention Center  
9:00AM to 4:00PM

☐ [GESET Conference](#)  
November 5, 2008  
Colorado Convention Center  
8:00AM to 4:00PM

☐ [Fall Fling 2008](#)

November 6 & 7, 2008

University of Colorado at Boulder

☐ [UC Boulder Design Expo](#)

December 6, 2008

University of Colorado at Boulder



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