

2018 Rocky Mountain Student Conference



Hello,

I hope everyone is looking forward to coming to South Dakota School of Mines and Technology's Campus soon. We are excited to host this year!

All competitions are detailed below. We are glad that we can expand on some of the competitions that we have, and build on some new ones. I hope your schools will enjoy them and my hope is that they'll make you think. If you have any questions, please ask.

Additionally, thank you to all of the schools that sent in their Technical Papers, Non-Technical Papers, and Concrete Canoe Papers. They all looked fantastic and I look forward to hearing the presentations. If you have not turned in your paper, please do so soon! Unfortunately, you will be assessed a penalty, but turning it in sooner rather than later is best!

If you have any other questions please feel free to ask us. We are here to make this conference go as smoothly as possible. Can't wait to see you soon!

Elizabeth K Larsen

Elizabeth Larsen

President of the SDSM&T ASCE Chapter

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Christopher Romanjenko

Regional Planning Chair for SDSM&T ASCE Chapter

(307) 752-0014, Christopher.romanjenko@mines.sdsmt.edu

ASCE Chapter

asce@mines.sdsmt.edu

Deadlines Summary

Participants:

March 5	Hotel Reservations Cut-off
March 15	Food Choice Deadline
April 5-7	Conference!

Host:

March 2	Mailer III (final schedule, parking passes, updates and addendums)
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Final Information:

◆ Awards Banquet Food Choices

Send in which food option everyone attending the banquet will want

1. Lemon Pepper Flat Iron + Dessert
2. Grilled Salmon + Dessert
3. Pesto Cavatappi + Dessert (Vegetarian)

Example: Elizabeth Larsen – Option 2

Deadline: March 15

◆ When You Arrive:

1. Check into your Hotel
2. Registration is from 5:00 – 6:00 pm, dinner starts at 6:00 pm
3. Parking is available at the Civic Center parking lots. Please leave trailers here.
4. Parking for the dinner will be at SD Mines stadium. You will need to walk a short distance to the King Center for the dinner itself.

Directions will be posted that day to ease this process. If you have questions, you can always call Elizabeth Larsen at (952) 913-9564.

◆ Conference Basics:

1. Send at least 1 representative to the Presidents/Regional Chairs Meeting Thursday night at 8:15 pm for all conference information and to get answers to any final questions you may have.
2. Send at least 2 representative to the Business Meeting on Friday at 4:00 pm. We will go over the Constitution, talk about the upcoming conferences, and discuss the business of the Rocky Mountain Region.
3. Enjoy the surrounding area! We are within 30 minutes of Mount Rushmore and have the Black Hills very close by as well. Enjoy Rapid City and all it has to offer!

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Tentative Conference Schedule

Thursday – April 5th		
5:00 – 6:00 pm	Registration	SD Mines Campus – King Center
6:00 – 7:30 pm	Welcome Dinner and Chapter Presentations	SD Mines Campus – Fraser Gym
7:30 – 8:30 pm	Mystery Design	SD Mines Campus – Hall of Fame
8:30 – 8:45 pm	Presidents/Regional Chairs Meeting	SD Mines Campus – King Center
8:30 – 9:00 pm	Concrete Canoe Captains' Meeting	SD Mines Campus – King Center
8:30 – 9:30 pm	Steel Bridge Captains' Meeting	SD Mines Campus – King Center
Friday – April 6th		
7:00 – 8:00 am	Canoe and Bridge Drop off	Civic Center – Rushmore Hall
8:00 am – 12:00 pm	Concrete Canoe Presentations	Civic Center – Alpine Room
8:30 – 10:00 am	Steel Bridge Aesthetics	Civic Center – Rushmore Hall
9:00 – 11:00 am	Pre-Design Competition	Civic Center – Rushmore Hall North
10:00 am – 4:00 pm	Steel Bridge Competition	Barnett Arena
12:00 – 4:00 pm	Technical Paper/Presentations	Civic Center – Alpine Room
12:00 – 4:00 pm	Non-Technical Paper/Presentations	Civic Center – Ponderosa Room
1:00 – 1:30 pm	Concrete Canoe Captains' Meeting	Civic Center – Rushmore Hall
1:30 – 4:00 pm	Concrete Canoe Aesthetics Judging	Civic Center – Rushmore Hall
4:00 – 6:00 pm	Swamp Testing <small>(Weather depending, it may be on Saturday)</small>	Memorial Pond
4:00 – 5:00 pm	Mandatory Business Meeting	Civic Center – Ponderosa Room
Saturday – April 7th		
7:00 – 8:30 am	Concrete Canoe Drop off	Angostura Reservoir
8:00 – 8:30 am	Concrete Canoe Captains' Meeting	Angostura Reservoir
8:30 – 9:30 am	Swamp Testing <small>(Weather depending, it might be the day before)</small>	Angostura Reservoir
9:30 am – 3:30 pm	Canoe Races	Angostura Reservoir
11:30 – 2:00 pm	Surveying Competition	Angostura Recreation Area
6:00 – 8:00 pm	Awards Banquet	Holiday Inn and Suites – Rushmore Plaza

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Hotel Accommodations

Two hotels will be available through our chapter for you to book rooms from. For both, mentioning that you are with the “ASCE Regional Competition” should be adequate in getting you the proper rate.

Conference: April 5th – April 7th

Option 1: Howard Johnson Hotel

Rate: \$65/room

Location: 950 North Street, Rapid City, SD 57701

Phone Number: (605) 737-4656

Distance to SD Mines: 7 minute drive

Distance to Civic Center: 3 minute drive, 12 minute walk

Option 2: The Holiday Inn

Rate: \$79/room

Location: 505 North 5th Street, Rapid City, SD 57701

Phone Number: (605) 348-4000

Distance to SD Mines: 5 minute drive

Distance to Civic Center: 0 minute drive, 1 minute walk

The cutoff date for both hotels is **March 5, 2018**.

Contacts for Regionals

ASCE Chapter: asce@mines.sdsmt.edu

Chapter President: Elizabeth Larsen, Elizabeth.larsen@mines.sdsmt.edu

Regional Chair: Christopher Romanjenko, Christopher.romanjenko@mines.sdsmt.edu

Treasurer: Timothy Felker, Timothy.felker@mines.sdsmt.edu

Chapter Advisor: Dr. Christopher Shearer, Chris.shearer@sdsmt.edu

If you have any questions, please contact the people listed above and they will help you as soon as they can. Thanks!

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Competition Rules

Please Review all Competition Rules As Soon as Possible!

Concrete Canoe Competition:

We will be following the 2018 ASCE Concrete Canoe rules, posted here:

<https://www.asce.org/rules-and-regulations/>

Steel Bridge Competition:

We will be following the 2018 AISC Steel Bridge rules, posted here:

<https://www.aisc.org/globalassets/aisc/university-programs/nssbc/2018-nssbc-rules-rev-12.pdf>

For questions and further details, please see the addendums that AISC posts on their website.

Technical Paper/Presentation:

The topic of this year's technical paper will be left to each individual school. However, the paper should focus on a technical issue that has relevance to the Civil Engineering field of study. The rubric used for this paper and presentation can be found below.

Non-Technical Paper/Presentation:

We will be following the Daniel W. Mead paper topic and rules, posted here:

<https://www.asce.org/mead-student/>

2018 Topic: *"How does the personal and professional use of social media relate to the ASCE Code of Ethics?"*

Papers will be presented by each school that is participating in this event. The rubric used for this paper and presentation can be found below.

Mystery Design Competition

This portion of the conference will exercise the ability of the engineering students to think on their feet, work under pressure, and produce a useable product in a short period of time. The actual competition will be revealed to participants at the conference just prior to the event beginning. Please plan to have **two participants** entered into this competition.

Pre-Design Competition

This year's Pre-Design Competition will test your ability to properly distribute water across an area. As Civil Engineers know, water is a required resource for human survival and thus needs to be spread to many different areas. It becomes more interesting when certain areas need more water than others and certain areas require less. This Pre-Design Competition will consist of each team designing and building a water distribution system to properly distribute water to required areas of a region.

For questions, please direct them to asce@mines.sdsmt.edu.

Surveying Competition

The full rules can be seen in the attached document labeled "RMRC 2018 Surveying Competition Rules". For questions, please direct them to asce@mines.sdsmt.edu.

Pre-Design Question Addendum

1. What is the inner diameter of the 20-foot-long black poly pipe feeding the water from the tank to the playing field and what is its roughness height?

The pipe has a Nominal OD of 2.285 in. and a Nominal ID of 2.067 in. This is classified as 2 inch, 100 psi Irrigation pipe Yellow Label.

2. What is the inner diameter of the 50-gallon tank?

The diameter is approximately 23 inches.

3. Is it ok for teams to utilize EPANET, a free hydraulic modeling software that helps analyze water distribution systems?

Yes!

4. Will the plastic receiving funnels rise to the level of the wire mesh? And will they be roughly as large as the 22 inch x 23 inch squares? If not, is it ok if our piping extends below the level of the mesh?

The wire mesh that will support the teams design will be fitted directly over the water collection funnels. The design should not extend beneath the wire mesh.

5. Are there two 6 foot x 10 foot boards, one for setup, and the other for active competition?

No. We will only be having one board. However, plenty of floor space will be provided for setup.

6. Are teams permitted to seek limited technical guidance from faculty or other experts?

Yes. We encourage the use of advisors. Of course, it must be a design and work of the students, but technical guidance is acceptable.

7. What is classified as a valve?

Valves are considered to be anything that is labelled a valve in its name. Additionally, a valve is something that is dynamic or adjustable after the final construction of the system. It should not be adjustable by hand on the floor or during set up at the competition.

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Paper Presentation Competition SCORING SUMMARY SHEET

Author's Name: _____ Date: _____

ASCE Student Organization Represented: _____

Paper Scoring Criteria	Score
1. Adherence to topic (10 pts)	/ 10
2. Presence of original ideas and research involved (10 pts)	/ 10
3. Command of subject matter (10 pts)	/ 10
4. Spelling and grammar / length (2000 word maximum) (5 pts)	/ 5
5. Overall clarity, organization, quality of paper and references (15 pts)	/ 15
Paper Sub-Total	/ 50

Presentation Scoring Criteria	Score
1. Degree to which presentation addressed and supported key concepts of written paper and theme of contest	/ 10
2. Ability to communicate key concepts from written paper and to convince audience of their importance	/ 25
3. Personal bearing (i.e. appearance, poise, eye contact)	/ 5
4. Delivery style (i.e. reading, memorized, conversational) / pronunciation and proper use of technical language and grammar / enthusiasm and voice projection	/ 5
5. Time (5 minutes +/- 5 seconds) (Beyond 5-second allowance: 0.05 point penalty per second difference from required 5 minutes, i.e. 5:20 or 4:40 = 1 point penalty)	/ 5
6. Errors in logic or facts (up to 10 points penalty)	() penalty
Presentation Sub-Total	/ 50
Paper Sub-Total	/ 50
Overall Score	/ 100

Eligibility requirements for advancement to National Competitions

The following qualifications are required of all ASCE Student Organizations in order to participate in an ASCE-sponsored National Competition.

1. Be in good standing with ASCE:
 - a. Have submitted their Annual Report and paid their Annual Dues, as received by ASCE, prior to the start of the Student Conference; and

FOR CONCRETE CANOE ONLY - Have submitted their student chapter full Annual Report in time to be graded (reports submitted on or before February 1, 2018 meet this qualification), and have scored within the top two-thirds (2/3) of all student chapters. **Student Chapters that submit an EZ annual reporting form do not qualify;** and

- b. Act appropriately. As representatives of ASCE and the civil engineering profession, all competition and conference participants are expected to and must act professionally and courteously. The use of alcohol, marijuana, or other controlled substance is strictly prohibited.

Note: Invitations to Conference and National Competitions are a privilege, not a right. Failure to act appropriately can result in letters of reprimand, mandatory behavior management plans, and loss of invitations to further competition for individual institutions and/or entire conferences.

2. Attend and participate in their assigned Student Conference as shown through their school's:
 - a. Good faith participation in the Student Conference Business Meeting (at least one (1) student representative present at the **start** of the Business Meeting);
 - b. Good faith participation in the Student Conference Paper Competition, including submission and presentation by at least one (1) member of the ASCE Student Chapter, not necessarily a member of the concrete canoe team; and
 - c. Meeting any additional requirements of Student Conference participation set by the Student Conference at the previous year's business meeting or in their written and approved by-laws, standing rules, or constitution.