

ASCE Newsletter

Kansas State University Chapter, Since 1923

February 22, 2007

In This Issue:

Page 1:

Tonight's agenda

Page 2:

Professor Profile -Dr. Brian Coon
Team Updates

Page 3:

News and Notes
ASCE History

Page 4:

Student Profile - Trent Dansel
Sudoku

Page 5:

Spring 2007 Schedule &
Officers

Put in your planner:

Engineering week: Feb 19 - 23

ASCE Ice Skating: Mar. 1st, 8-10 pm

Open House: Apr. 13 - 14

Apr. 13, 2:30 - opening ceremonies

Apr. 14, 6:30 - banquet



Tonight:

Introductions: Joyce Smith

Practitioner Advisors:

Dave Karnowski

Jeri L. Meyer

Earl Tast

Honorary Lifetime

Contact Member:

Bob Thorn

Faculty Advisors:

Dr. Melhem and Dr. Stokes

Officer Reports:

President:

Joyce Smith

Vice President:

Chad Banka

Treasurer:

Joey Holste

Recording Secretary:

Wilson Smith

Corresponding Secretary:

Trent Dansel

Newsletter Editor:

Emily Frey

Historian:

Ken Kuehne

Stu-Co Rep:

Coty Hinman

Freshman/Soph Rep:

Kurt Hershey

Graduate Student Rep:

Brandon Decker

Activities Chair:

Brian Coomes

Special Projects Chair:

Anthony Dowling

Open House Chairs:

Cody Cates and Eric Byrd

Steel Bridge Chairs:

Josh Lipscomb

Steven Hammerschmidt

Concrete Canoe Chairs:

Bryan Donze

Paul Bruss

Webmaster:

Douglas Duncan

Agenda:

Announcements: Joyce Smith

Presentation: Doug Duncan, Cody Cates, Coty Hinman,
and Trevor Tast

Topic: "Workshop for Student Chapter Leaders"

Introduction of Speaker: Chad Banka

Speaker: Dr. Bob Smith

Topic: "Financial Literacy for K-State Civil Engineers"

Professor Profile

Dr. Brian Coon

Brian Coon was born in Iowa City, Iowa and attended the University of Iowa to get his B.S.E in mechanical engineering. While he was there, he served as a student senator and an executive officer for the Undergraduate Collegiate Senate. He then attended the University of Nebraska-Lincoln and obtained his M.S.E in civil engineering and completed his Ph.D. in engineering. He is a licensed civil and mechanical engineer in Nebraska. He also received his J.D., Criminal Litigation Certificate from the University of Nebraska College of Law and is licensed in Colorado and Nebraska.

Coon has worked as an engineer for Midwest Roadside Safety Facility, been an expert witness for accident reconstructions, and a State Representative for the Iowa House of Representatives. He chose to come to Kansas State because of their Transportation Research Excellence. Dr. Coon has won many awards throughout his career, including being a Fulbright Scholar at the Swedish Road and Transport Institute in Linköping, Sweden. He has also won the Practical Paper Award through the Transportation Research Board and the American Patriot Award through the Concerned Women of America.

Dr. Coon's research career has led him to many topics including Guardrail Runout Lengths, Accident Reconstruction, Accident Analysis and Prevention, and Engineering Law and Ethics. He has experience teaching Mechanics of Materials, Materials of Construction, and Introduction to Geotechnical Engineering.

In his free time, Coon enjoys woodworking, biking, target shooting and law enforcement. Here in Manhattan, he has been participating in Reserve Deputy Training through the Pottawatomie County Sheriff's Office. Something you might not know about Coon is that he has prosecuted criminal cases in the County Attorney's office in Nebraska.

Team Updates

Concrete Canoe

"Everything is finally coming together for the canoe team. The mold for the canoe has some final touches and the mix design should be finished soon as well. We are planning on pouring the canoe on the morning of March 3rd. We will need as many people as possible to accomplish this task!"

Steel Bridge

Last weekend, we finished the connections on the trusses and legs and they are now able to stand up. On Tuesday, we received our pieces for the deck back from the plasma cutter. Now, this weekend, we can begin to make the connections for the deck and are hoping to have the deck finished by this weekend. The team also raised over \$36,000 at Telefund. Looking ahead, after the deck is finished, we plan on working on the cross bracing and the hangers.



A piece of the bridge deck after being plasma cut.

News and Notes

Scholarships

James L. Ogden Memorial Scholarship

Criteria:

- \$1,000 shall be distributed in the form of an annual scholarship. The scholarship will be awarded by semester (\$500 each in the fall and spring semesters.)
- Applicants must be currently attending Kansas State University or the University of Kansas with a declared major in CIVIL ENGINEERING and have a minimum of twelve (12) hours completed in his/her major.
- Students must submit an official copy of his/her transcript with the application.
- Students must have a current GPA of 2.5 or above.
- Applications are due by March 31

Association of State Dam Safety Officials

- Scholarships up to \$10,000 for the 2007/2008 school year.
- Applications due by March 30, 2007.

American Institute of Steel Construction, Inc.

- One scholarship for \$5,000 will be awarded.
- Applications due by April 9, 2007.

Internships and Jobs

The following companies have openings available for internships or jobs. Go to the ASCE website and click on Bulletin Board to get applications.

Oregon Department of Transportation

-full time & internships (www.odotjobs.com)

HDR Kansas City

-full time (www.hdrinc.com)

Advanced Construction Techniques Ltd. (ACT)

-full time

HBE

-full time (resumes@hbecorp.com)

HWS

-full time & internships (www.hws.com)

WSP

-full time (susan.pace@cox.net)

SMH

-part time in Manhattan (jhancock@sloanandmeier.com)

For more information & applications,
Check out the ASCE website at:
www.engg.ksu.edu/asce

ASCE Notable History

Every year, the Kansas State Chapter of ASCE sends in an annual report. It's interesting to look back and read these reports to see what ASCE was like in years past.

In the 1939-1940 school year, R.A. Seaton was the Dean of Engineering and Professor L.E. Conrad was the Head of the Department of Civil Engineering. There were nine members of the department of civil engineering personnel - Professors W.W. Crawford, L.V. White, L.E. Conrad, F.F. Frazier, M.W. Furr, instructors Merlin D. Copen, John E. Wherry, C.M. Moeller, and secretary Miss Eugenia Grob.

They held 13 regular meetings and 6 special meetings that year and attendance at chapter meetings was compulsory (required). There were a total of 96 members in civil engineering, 89 were chapter members of ASCE. They set up their meetings so that there was a general engineering meeting once a month and the departmental meetings were held on the first and third Thursdays of the month. I thought it was interesting that we still hold our meetings on Thursdays today.

That year the seniors joined others in chemical, mechanical, electrical, and architectural engineering to participate in the annual inspection trip to Chicago. Some of the places they visited were the Carnegie Illinois Steel Corporation, Southwest Sewage Disposal Plant, Portland Cement Association, Chicago Bridge and Iron Works, and the Shedd Aquarium. The report of the trip also included, "in the evenings some of the boys visited Chicago's night life."

During the meeting on Feb. 15th, 1940, the chapter selected a Junior Contact Member (I think similar to our Practitioner Advisors), nominated George W. Vaught as the St. Patrick candidate, and the Open House committee heads gave reports of their progress. Fifty-eight members and five faculty members were in attendance.

Student Profile

Five minutes with Trent Dansel

Where are you originally from? Jetmore, Kansas is a small SW KS town of around 900. I graduated as a Longhorn in 2003.

Tell us about your family. My family is important to me. Tyler (26) is married to Sara and he teaches business at Goddard High School; she teaches middle school science at St. Marks Elementary (no nieces/nephews yet). They live in SW Wichita. Nichole (23) attends Duke University, is studying to be a Physicians Assistant and will graduate in August. Collin (17) is a junior at JHS and the drummer/emcee for the up-and-coming rock band "Stuck In Neutral!" Our dog, Rocky, is 10. I credit my dad, David, for my devil-like handsomeness and superlative athleticism, and my mom, Laurie, for my above average intelligence and humility.

What year in school are you? I'm a fourth-going-on-fifth-year senior.

Why did you pick civil engineering? I'd have to say because infrastructure, especially the interstate system, impresses me so much. People don't even think about it, but if you take away civil engineering, the world stops. I wanted to get in on the overlooked but incredibly important supporting role that we play. Also because, as a high school student I heard that CE's don't have to take very much math, physics, or chemistry.

What are some cool jobs you've had? Growing up, I worked on the farm. I spent an awful lot of time on the tractor, but also found time to feed, doctor, and brand cattle, mend fence, and work on any equipment that I happened to break.

For the past four seasons, I've been a manager for K-State's football team. I worked the first three with the quarterbacks, but the coaches wanted to see how I'd fare at tight end, so they moved me there for the '06-'07 season. Actually, they wanted someone who was able to throw to the TE's during practice drills and pre-game warm-ups, and because I was a career backup quarterback in high school, they thought I was the man for the job. The best part of this job is traveling to the away games.

Last summer, I was a maintenance inspector for the City of Wichita. This job gave me a daily opportunity to listen to my favorite sports radio personality, ESPN Radio's Colin Cowherd. Also, it gave me an immeasurable amount of positive experience directly related to civil engineering and it's post-college application.

What do you like to do in your free time? I've played the drums for about twelve years now, so I love to do that whenever I get the chance, which is not nearly often enough. I also enjoy driving and working on Suzie, my 41 year old girlfriend, a 1966 Mustang. I like movies, collegiate sports, and nearly every type of music except free-era jazz.

What have been your favorite classes? Why? I liked CE 411, Route Location and Design because it covered the type of material that interested me in CE in the beginning. I also enjoyed CE 528, Foundations because it was interesting to learn how buildings are supported; something else that most people give no thought to. Currently, I'm enjoying my History of Jazz class because I like music, and it (Jazz) is the only true American art form.

2			1					
9	4	5			1			
	7	9						3
			4	7	2		3	
		8	2	1	9	4		
	2		9	3	4			
1						2	9	
			5			7	1	2
					6			8

Schedule and Officers

Remaining Schedule Spring 2007

March 1st

Officer's Meeting
7:00PM (CE conf. room)

March 8th

*Assembly
7:00PM (DUF1107)

March 15th

Officer's Meeting
7:00PM (CE conf. room)
** Highway Cleanup

March 29th

Officer's Meeting
7:00PM (CE conf. room)
** Highway Cleanup

April 5th

*Assembly
7:00PM (Rathbone 1073)

April 12th

Officer's Meeting
7:00PM (CE conf. room)

April 19th

** CE Picnic

May 3rd

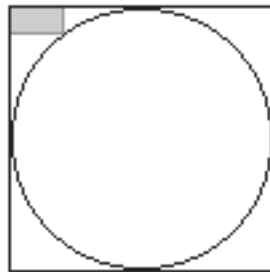
*Assembly
7:00PM (DUF 1107)

*counts as Assembly Credit
**counts as an extra credit

Feel free to send comments and suggestions for the newsletter to:
erf@ksu.edu

Spring 2007 ASCE Officers

OFFICE	NAME	E-MAIL
President	Joyce Smith	jesmith@ksu.edu
Vice President	Chad Banka	cbanka@ksu.edu
Treasurer	Joey Holste	joeyh@ksu.edu
Corr. Secretary	Trent L. Dansel	tdansel@ksu.edu
Rec. Secretary	Wilson Smith	was4@ksu.edu
Newsletter Editor	Emily Frey	erf@ksu.edu
Historian	Ken Kuehne	ken45@ksu.edu
Stu-Co Rep.	Coty Hinman	coty@ksu.edu
Fresh/Soph Rep	Kurt Hershey	khershey@ksu.edu
Grad. Student Rep.	Brandon Decker	brd9889@ksu.edu
Activities Chair	Brian Coomes	bcoomes@ksu.edu
Special Projects Chair		
	Anthony Dowling	awdowlin@ksu.edu
Webmaster	Douglas Duncan	douglas2@ksu.edu
Open House Chairs	Cody Cates	ccates@ksu.edu
	Eric Byrd	ebyrd@ksu.edu
Concrete Canoe Chairs		
	Bryan Donze	bdonze07@ksu.edu
	Paul Bruss	pjb2@ksu.edu
Steel Bridge Chairs	Josh Lipscomb	lipscomb@ksu.edu
	Steven Hammerschmidt	hammer@ksu.edu

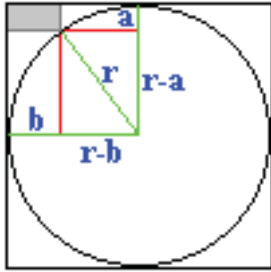


In the figure, the rectangle at the corner measures 1 cm x 2 cm. What is the radius of the circle in cm?

Hint: Construct a right-angled triangle in the circle and use Pythagoras' Theorem.

Answer on back.

Solution:



Using Pythagoras' Theorem for the right-angled triangle in the figure,

$$(r - a)^2 + (r - b)^2 = r^2$$

Now, $a = 1$ cm and $b = 2$ cm. So,

$$(r - 1)^2 + (r - 2)^2 = r^2 \text{ or}$$

$r^2 - 2(1)r + 1^2 + r^2 - 2(2)r + 2^2 = r^2$. This simplifies to

$r^2 - 6r + 5 = 0$. On factorizing, we get

$$(r - 5)(r - 1) = 0.$$

Thus, the radius of the circle is 5 cm.

Food for thought:

In the above solution,

$$(r - 5)(r - 1) = 0.$$

Thus, $r = 5$ cm. The other possibility ($r = 1$ cm) is rejected. Why?

Is the following reasoning valid?

$r - b = 1 - 2 = -1$ cm. No negative dimension is allowed.