

TUBES AND WIRES

Tofino Surf Trip

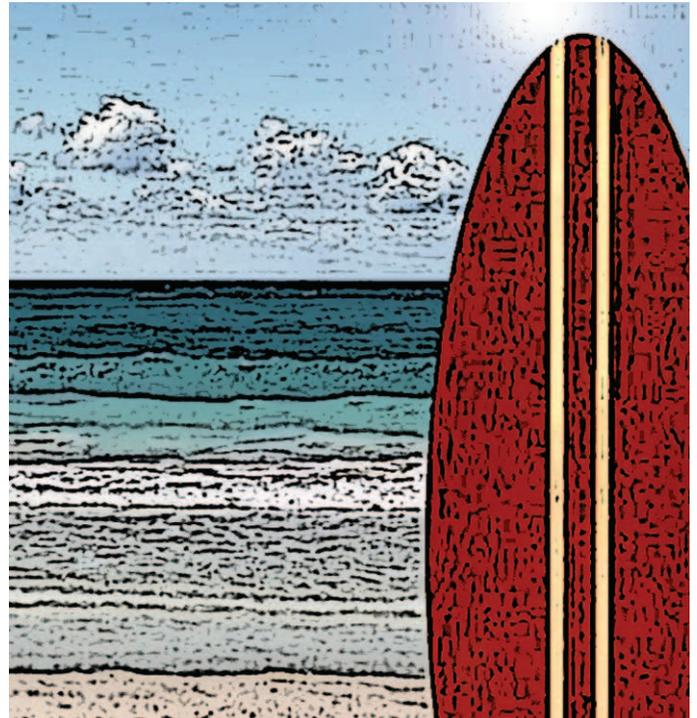
The long weekend is just around the corner, so be prepared for the Tofino Surf Trip.

Tofino bound surfers will depart the morning after Canada Day, and will enjoy waves, camping, good times. The cost is your own food, beverages and surf rentals.

The trip will run from July 02, 7 a.m. - July 04, 4:30 p.m. at Kennedy Lake. The ESS will reimburse fuel costs and car pooling may be a possibility for those stranded without a ride.

There is a signup sheet outside the ESS office. Please sign up if you plan on attending so that transportation can be coordinated.

Check out the Facebook page for all the details.



ESS Exam Database Notification

The exam database is no longer accessible from non-UVic computers. This includes connecting through your own computer on campus. To access the database from your own computer install VPN: <http://web.uvic.ca/vpn/installwindows.html> and this will allow you to access the database.

Do you have exams that you would like to add to the database?
Email them to essb-tec@engr.uvic.ca. PDF format is preferred.

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UVic: An Institute of Advanced Education?

I'm really beginning to wonder whether UVic is an institute of learning, or an institute of profit. It has become glaringly obvious over the past couple months that the university has no intention of providing us with a suitable learning environment. If you haven't figured it out yet, I'm referring to the ongoing construction that is happening on the various buildings on campus. All of my classes are in buildings which are undergoing construction. Every day I have to try and pay attention through the hammers, saws, and grinders. This is unacceptable.

Next time you're in class, look around and count how many people are there. Next multiply that number by \$500 and you'll see how much we've collectively paid for that class. The number (in the thousands) should merit a suitable learning environment which is free of distraction. As an institute of advanced learning, this should be the university's primary concern.

I understand that the construction is necessary to make our buildings safer and that doing the construction in the summer, when there are fewer students, minimizes the problem. That being said, we're not paying less than the students in the spring/fall, and I feel that we deserve the learning environment that we're paying for. So it seems that a solution to this problem is needed; enter the problem solving engineer!

Solution number one: Close the windows. Well, we tried that one. The classroom turned into an oven and put people to sleep. And for those who stayed awake, they fought through the horrid odors emanating from 30 students swimming in their own sweat. Solution rejected.

Solution number two: Ask the university to relocate our classroom. This one really made sense. You would think that there would be dozens of empty classrooms in the summer.

The university, however, informed us that all the other classrooms are booked for conferences and the only other available room was in the same building, which doesn't solve the ongoing construction problem. I think we can all agree that this is a load of bull. There's no way that every other classroom on campus is booked for a conference. The fact that the university reserves its rooms for conferences should warrant serious

concern. We're paying a substantial amount to be here and the university is holding out on ideal classrooms so that third parties are able to book conferences? To me, this indicates that their conferences are more important than our educations. The relocated classroom solution will continue to be pursued but for now it remains rejected.

Solution number three: Move the construction to afternoons, evenings, and weekends. There is absolutely no reason why the construction schedule couldn't be changed. UVic's campus is pretty much dead on the weekends. Construction could be going full tilt on 12 hour shifts on both Saturdays and Sundays. Shortened 6 hour work days could be implemented during the week starting at 2:30; most classes are finished by that time. This would provide a suitable learning environment for the students, and leave fewer bodies in the way of the construction workers.

The only drawback of this solution is that the construction workers wouldn't want to give up their 9-5 shifts. I can sympathize with that; however, the bottom line is that they're contractors doing a job and they're paid to be here. We're essentially customers of this university and we're paying hand over fist to be here. As a business and learning institution, the university should be catering to the needs of the students, not the contractors. As students, it's been a long journey to get where we are, and along the way we've paid a lot of money towards this institution. When the university allocates its optimal classrooms to conferences and not lectures, this is a serious problem. When they cater to the working schedule of contractors and not to their students, this is also a major concern. To me, these are clear indications that the University of Victoria does not care about my educational experience. This is not an institution dedicated to learning, but rather a business with the sole goal of maximizing profits.

With any luck, a university bigwig will get a chance to read this and perhaps things will change. But in the mean time, enjoy the soothing sounds of hammers, saws, and power tools, which are more important than your education.

Bitterly,
Rob Bellrose



On a Sad Note

Early, last Sunday morning, Ross Sherman (3rd year, mechanical engineering) was badly injured in a motocross crash during the second round of the Canadian Nationals. He was air lifted to the Edmonton University Hospital where he is currently in a state of a coma.

We would greatly appreciate your prayers for Ross and his family during this difficult time. If you would like updates on Ross's progress email me at joshuareame@yahoo.com. Keep fighting man, you got this!

- Josh Reaume

Victoria Sewage Treatment

In 1968 I was assigned the task of assessing a permit application under the then *Pollution Control Act* to discharge raw screened sewage down a long outfall off Victoria's coast. It was well substantiated and the criteria adopted were conservative. A permit was issued with a condition that an independent monitoring program be carried out and the University was selected for that task. Subsequently a second long outfall was promoted and the monitoring results for these two outfalls have been going on ever since. A succession of biologists, oceanographers and medical health officers have come and gone and not one has recommended that treating the sewage is necessary.

There has always been pressure for such treatment to be provided and it reached a climax 20 years ago at which stage I wrote a booklet, *Victoria's Sewage Circus*, to give the public the facts. A referendum to provide treatment was defeated.

However, our Provincial Minister of Environment, the Honourable Barry Penner,

has ordered such treatment to be provided. In justification he quoted from the text of a report on the long outfalls by an American organization, the Society of Environmental Toxicology and Chemistry (SETAC). However, the only reference to treatment in its conclusions is "a potential approach might be to install treatment." No report has examined the adverse impacts of the environment and on public health and safety of building and operating land-based treatment.

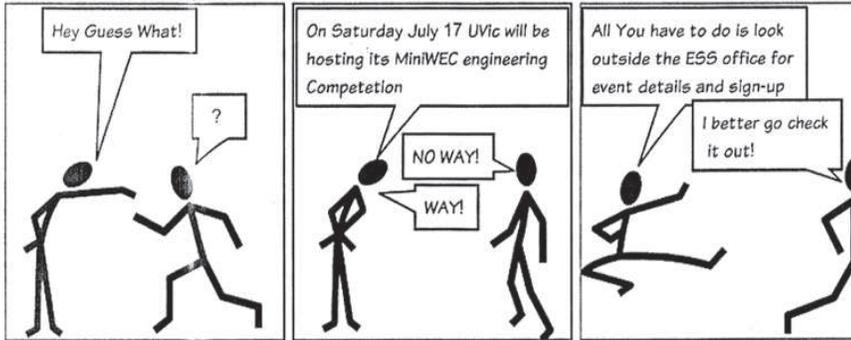
The chance of the existing system doing damage is negligible but the damage done in manufacturing, transporting and installing the materials for the plant(s) and operating them will be substantial. It has never been calculated. The order of cost is a billion dollars. Professional engineers are working away on this now. It will almost certainly do more harm than good.

Ted Dew-Jones PEng, Victoria, BC
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MINIWEC - BY TAYLORENTZ



Brain Buster

A square medieval castle on a square island is under siege. All around the castle there is a moat 10 meters wide. Due to a regrettable miscalculation the raiders have brought footbridges, which are only 9.5 meters long. The raiders cannot abandon their campaign and return empty-handed. How can the assailants resolve their predicament?

Answer To Last Issue:

(How to match your attic light bulbs to their basement switches making only one trip upstairs).

Turn one light on for an hour, turn it off, then turn on a different one and go upstairs right away. One light bulb will be warm, one light bulb will be cold and one light bulb will be on.

-Jarrad Astren

Mechanical engineering solution: Cut a hole in your ceiling so you can see the bulbs from downstairs. You will be able to easily solve the problem now, but draw a free body diagram, and compute redundant vector calculus equations just to be on the safe side.

Electrical engineering solution: Take off the light switch covers and add 2 resistors in series to one line, 1 resistor to the second line and no resistor to the third line. Turn all three switches on and go upstairs. Use your multi-meter to measure the current through each bulb. The one with the least current has the largest resistance and the one with the most has none. Assume your resistors are identical.

Computer engineering solution: Go upstairs and put a webcam down so that you can see all three bulbs. Head back downstairs and turn on the lights on at a time. You probably already have a webcam up there you don't need to go up.

Software Engineering solution: Call Jason Corless. He's awesome!

-Cam Smith

Super Sudoku

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

Contributors:

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 Josh Reaume Mike Anderson

Editor's Quip

I don't have anything witty left to say. May your reading week be rowdy and filled with no reading. Signing off.
 - B. Nikolaisen