INVESTIGATIONS

1. Students’ Final Year Project becoming the key to their future job
2. The Technical Electives Dilemma
3. What do students think of the civil engineering professors?
4. Study Abroad 101
5. The Burden of the Summer Internship

ACTIVITIES AND EVENTS

1. Keeping up with the CES Events
2. American Society of Civil engineers meets CES
3. Dr. Bilal Hamad addresses the Fouad Boutros Highway

POET’S CORNER
1. The End
2. Hills of fire

8 FUN AND GAMES

8 STAFF

Students’ Final Year Project becoming the key to their future job

Written by Ghida Ismail

Fourth year engineering students sum up their undergraduate courses by completing a Final Year Project (FYP) which they are required to present at the end of the year. The best six papers are invited to present their work in the annual FEA conference in front of most of the faculty members.

A question that is posed here is what if the judges of the presentations also included engineers from renowned firms such as Dar El Handasa, Khatib w Alameh etc.? Accordingly if they were impressed by one of the projects’ work they could offer the students an interview or a referral for a job in their respective companies. Considering the ever-increasing competition level in the job market, such an initiative will greatly benefit and advantage the students. Nonetheless, the combined fields of expertise of the engineers present should span the whole civil and environmental engineering subjects, from transportation, to structures to geotechnical to hydrology to environmental engineering subjects.

Malek Kronfol, fourth year civil engineering student agreed with the fact that engineers from different firms should be present, however he added that they should be spectators and not judges since sometimes the projects’ subjects are too technical or too research oriented for them to judge on an academic level. “However if the engineers are spectators in the audience, they could then freely judge by their respective companies’ standards whether the students deserve an opportunity,”

The Technical Electives Dilemma

Written by Maher Said and Ghida Ismail

Recently, with the increased number of civil engineering students, the technical electives offered in the civil engineering department seem very few and unbalanced, “Considering the amount of students in civil and environmental engineering, you would expect to find available more technical courses” said Alaa Hayek, third year civil engineering student. Hayek added that some courses are at full capacity without having accomplished all the students that wanted it, whereas other classes only include two students.

This unbalance in classes causes students to settle for courses they are not interested in. Conversely graduate students state that to be able to perform well on the technical electives, students must be interested by the topics.

Another problem posed by the students is the time overlap between the technical elective courses.

“I want pursue my education in structures, thus I wanted to take both pre-stress and steel courses, but I wasn’t able to because they were given at the same time,” said Nadim Kawa, fourth year civil engineering student. Furthermore Kawa explained that the only structures course given in the spring was Steel II, thus those who haven’t taken Steel I in the fall aren’t capable of taking a structure course in the spring. Although professors generally believe that the number of offered technical elective courses is reasonable when considering the current faculty size, they believe the number should be increased.

Some point out to the fact that such lack in technical elective courses is apparent in certain tracks more than others. This, as previously stated, is the direct consequence of the lack of sufficient faculty in the department. For instance in the Water Resources track, given the number of full time faculty members of two (Dr. Basha and Dr. Abou Najm) and the support of Dr. Inglessis in teaching the fluid mechanics course, each of Dr. Basha and Dr. Abou Najm has to offer the Hydraulics course and the Engineering Hydrology course respectively.

Due to the latter, they would be generally able to...
only offer one graduate course each. Therefore, the students would have a small pool of technical electives related to water resources to choose from. Add to this the fact that one is only able to take two courses from each track and that he or she must also fit the courses to their schedule, the pool of available courses constrains to a mere two or three courses. Therefore, the courses through which one must experiment to find his or her passion – or hatred – to a field and another, end up being the courses one is forced to take. This lack in advanced courses eventually not only impacts the undergraduates, but graduates alike. Graduate students would have an even smaller pool to choose from given that they are normally restricted to their field of studies. For Master students, that is generally manageable as they have to take 8 courses over 4 semesters. With the help of advisors through shuffling the courses they make available and providing Special Topic courses on their own time, the student manages eventually to graduate while taking diverse courses. Although, one must still point to the fact that such students typically won’t have an option on what course to take, they would register what is offered in their fields. The problem is most apparent in the case of PhD students – especially those who already hold AUB degrees. If a student is to get his Bachelor’s and then his Master’s degree, he or she would have already taken 8 or so courses in his/her field with the few professors in each, that coming up with further courses for the student to attend becomes highly burdensome. Add to that the fact that level 7 courses (i.e. CIVE #77) are typically not offered. Courses need to have a minimum number of students and, given that undergraduate students cannot register such courses, the graduate students are generally not enough for the course to go through. When asked about an approach to such issues, the professors made two main points. The first, being already implemented, is providing students with Special Topic courses. Some of them believe that this opportunity is great not only for graduate students, but undergraduate students alike; they even encourage undergraduate students to take such courses. The second is based more on the strategic plan of the department. Such plan needs to accommodate for a balanced professor-to-student ratio. It is important that while the department increases the number of faculty members, that the number of students – specifically undergraduate students – doesn’t increase proportionally as to allow such members to offer more advanced courses and provide the flexibility in terms of choice to the students.

### What do students think of the civil engineering professors?

*Written by Maher Said*

At the end of every semester students are required to fill the Instructor Course Evaluation (otherwise known as the ICE). That is followed by students disclosing in their responses either hatred or love towards certain professors. Civil News, accordingly, took the liberty of surveying several students on their opinions regarding their Civil and Environmental Engineering professors and their teaching efficiency. Responses are diverse including a vast range of positive and negative responses. Several of the responses demonstrate the potential of professors as pioneers in their fields, their passion towards teaching and unremarkable communication skills. Students portray such pleasant opinions on their professors in a variety of ways. Some are verbose and emotional while others are concise, such as – in extreme cases – “Epic.” However, other responses took a different – negative – direction. In some cases, such negative responses are mild, pointing out that a professor hasn’t provided the students with a syllabus at the beginning of the semester or that a professor is generally monotonous. Other responses point out that exams are unfairly harsh, a professor is too serious or a course is incomprehensible demanding. Several students point out that some professors teaching skills are weak or that they come unprepared to class whereas other responses point out the short tempered nature of some professors. More disquieting cases would be those where students indicate cases where the professor would mock students during class; one of the examples called attention to a student being made fun of for being fat. Cases of utilizing “vulgar” words and swearing during a class session are also present. Some feel that they are treated as inferiors by such professors who employ a mocking approach in the classroom.

Consequent to such feedback are comments from the students on their satisfaction with the classroom environment. In cases where the student would praise his or her professor, the student would generally demonstrate a certain joy in being in a class taught by such a professor and mention that one “learns a lot” in such classes. Conversely, students who display a certain level of dissatisfaction with the professor exhibit discomfort in taking courses with such professors and point to the fact that they do not learn much in such environments. As a result, one wonders: Are the professors themselves aware of their pros and cons as academicians and teachers and are they working towards self-improvement? Is the department conscious of such issues and are they taking any measures to ensure students receive the highest level of education they – and their parents – are expecting? What happens with ICE forms filled by the students? Dr Mutasem Fadel, chairman of the Civil and Environmental Engineering department, explained that the Teacher evaluation forms are sent to the corresponding Professor, Chair of the Department, and Dean of the Faculty. Dr Fadel added that the forms are accessible to upper administration and the university publishes Statistics by Department and Faculty for all courses evaluations considering all questions that the students respond to. He claimed that “the evaluations are considered seriously by each professor to help improve the course in future offerings, they are equally considered in the evaluation process of faculty files / merits / applications / promotions.”

---

**“Considering the amount of students in civil and environmental engineering, you would expect to find available more technical courses”**

The Technical Electives Dilemma

(continued from page 1)
If you Google the words study abroad, your browser will be flooded with BuzzFeed-like articles entitled something along the lines of “10 reasons why you should study abroad”, which will include clichés about gaining new perspectives, learning to be independent, or getting immersed in new cultures. However, they are clichés for a reason, and if you’ve heard them all a billion times, it’s because they’re true. Studying abroad, aside from looking good on your CV, could very well be the greatest venture you undertake in your academic career. It is also certainly an advantage that AUB encourages its students to take a semester or two abroad and that there is an entire office called the OIP (Office of International Programs) perfectly equipped to guide you through the process.

Where?

Before scanning the world map and pinpointing the country you’d like to be in, it’s important to decide what you’re looking for in your study abroad experience and do your research accordingly. Generally, if you want to go for a fall/spring semester or a year, it is optimal to find a university that offers your major to ensure earning credit for the courses you take. Nevertheless, if you’re planning to enroll in electives, summer would be more ideal and the choice of places to go is limitless. Students have two options when choosing which university to attend. The first is applying to be nominated by the OIP for an exchange program, whereas the second is applying to any accredited university worldwide provided it accepts visiting students and offers courses that could be approved by AUB faculty (either as degree requirements or electives). Among the many universities that are in partnership with AUB are Boston University (BU) in the US, Sciences Po in France, and Lund University in Sweden. This also comprises the Erasmus Mundus program, which allows AUB students to spend a semester or year at partner universities in European countries, including Spain, Italy, and Germany, among many others.

Another exciting prospect is AUB’s Salzburg Academy program for summer semesters, where students can earn 6 credits for two General Education electives (social sciences or humanities). The -Sweek program takes place in the 18th-century palace where major parts of the movie The Sound of Music were filmed. Joanna Zeenny, a senior graphic design student in FEA described her experience at Salzburg as very captivating. She also continued, “The people were incredibly smart, and the studies were conducted in a way that allowed a lot of give and take, but the best part is the country and the amazing new friend you share it with.”

As for the second option, the OIP website provides various lists of non-exchange programs around the world, some of which are at Harvard, Yale, Berkeley, Cambridge, LSE, and the list goes on and on. The most popular one for Civil Engineering students across the years has probably been the UC Berkeley summer program. Joanne Aoun, a third year student, spoke of her experience there by saying, “Berkeley ruined my life, because nothing I ever do will come close. San Francisco is the most genuinely pleasant place to be, and there is never a shortage of exciting things to do. When I wasn’t studying for one of my 3 courses (Engineering Management, Modern Philosophy, and Chemistry Lab), I was biking on the Golden Gate Bridge, roadtripping to LA, hiking in Yosemite Valley, or clubbing on campus!”

While Boston University has been more common for fall or spring exchange, it also offers a summer program, which does not require nomination. “I’m planning on taking two courses: Introduction to Philosophy and Sustainable Energy,” stated Paul Gharzouzi, a civil engineering student who is applying to BU for Summer 2014. He explained that he is mostly interested in “trying the study abroad experience and discovering student life in a foreign country.” There is a myriad of other intriguing options as the list is extremely comprehensive and is categorized by country location, in addition to a separate one for recommended summer programs. Therefore, looking through them would definitely give you a better idea of what is more compatible with your interests.

How?

At the educational level, there is no essentially difference between exchange and non-exchange programs; the only variable factors are the application and payment procedures. Places in exchange programs are offered to a limited number of students with a minimum GPA of 78, and the application is carried out entirely through OIP. For all other programs, students apply directly to the host university according to its specific deadlines. In both cases, the study abroad application should be filled out and submitted directly to OIP. In order to receive credit for your courses, a course equivalence form for each one must also be submitted after being signed by the corresponding department chairperson.

In addition, there are certain basic eligibility requirements such as being in good academic standing and having completed 24 sophomore credits. It is against regulations to apply in your final semester at AUB, and Civil Engineering students must take into account that they usually cannot study abroad during the senior year due to the Final Year Project.

While the paperwork may seem daunting at first, it is certainly worth the outcome, and all the necessary information and forms are available on the OIP website. Some programs may have specific requirements that can be found online as well. The OIP team is also very welcoming and helpful to interested students, and you can pay them a visit at the office in West for assistance or guidance.

How much?

Finally, tuition and housing fees are understandably a very important aspect to consider before going abroad and the relevant information is easy to look up. For exchange programs, students pay their usual tuition directly to AUB, while all other programs require payment to the host university and the amount varies according to the program. While some may be relatively expensive including those at Columbia and Harvard, others program tuitions are equivalent to a semester at AUB or even less such as the Salzburg program. As for the Erasmus program, the European Union funds tuition, plane tickets, health insurance, and a monthly allowance for food and housing, which is a pretty amazing deal.

Written by Ellen Francis
The spring semester started with the CES’ Open Wings and Drinks dinner on Thursday February 6 at 8pm in Shtrumph Ashrafieh. The dinner included more than sixty students as well as many professors such as Dr Hiam Khoury, Dr Maya Abou Zeid, Dr Majdi Abou Najm and Dr Elie Hantouch. “It was a chance for students and professors to mingle in a non-academic environment,” said Reina Tabbara, second year civil engineering student.

Then the semester went on with the annual ski trip organized by the CES in collaboration with the FEA SRC. The trip took place in the Cedars on the weekend of February 8 and 9. A ticket for the event covered, a night stay at the Tirol Hotel, a diner, a party and breakfast. Due to the lack of snow this year, the students were encouraged to tour the region on ATVs or take a hike through the Cedars natural reserve.

"The very next day I receive an email from the career center saying that the firm in Qatar withdrew the offer because they did not have a good experience with AUB students."
This semester the CES worked on expanding to become part of the American Society of Civil Engineers (ASCE). Students were encouraged to fill forms that will officially make them members of the ASCE. Furthermore, members of the CES cabinet were invited to an ASCE conference. The conference included representatives from Civil engineering societies from different universities such as Notre Dame University (NDU), Lebanese American University (LAU) and University Saint Joseph (USJ) with their respective advisors as well as the current president of the ASCE, Dr. Makram Suidan who is also the Dean of the Faculty of Engineering and Architecture in the American University of Beirut.
American Society of Civil engineers meets CES

[continued from page 5]

During the conference, students got to learn more about the ASCE and its objective, Dr Suidan explained that the ASCE “is intended to strengthen the relationships between faculty, students and practicing Civil Engineers through shared activities, presentations, and functions. Ultimately, a mentorship program can develop.” Furthermore a representative of the civil engineering society from each of the universities, introduced the role of his/her society in his/her respective university and its activities and events. The students got the chance to socialize and decided to organize an event that will combine all the civil engineering societies from the different societies. The event eventually took place Sunday May 18 in Le Rancho in Adma and included a parade and different activities.

Dr. Bilal Hamad addresses the Fouad Boutros Highway.

Written by Frederic Abou Jaoude

The Fouad Boutros Highway, extending from Charles Helou Avenue to Armenia Street, represents a solution to reduce traffic and pollution however the highway passes through cultural buildings many advocate to preserve.

Addressing the controversy of the Fouad Boutros Highway, AUB professor Dr. Bilal Hamad gave a lecture in Bechtel’s ELH on April 2. As the mayor of Beirut, Hamad explained that this project was planned in 1973 and will be a combination of bridges and underground tunnels to help accommodate the 600,000 cars in Beirut and the 250,000 cars that enter Beirut daily.

“What differentiates citizens and officials is that the latter should be courageous and take the decision that would benefit future generations,” Hamad said. Dr. Hamad showed the audience graphics and architectural photos of the highway as well as photos of the buildings that will be affected by the construction which Hamad described as non-cultural and just old.

The municipality stated that the highway aims to increase green spaces, reduce air pollution, provide more parking places and solve Beirut’s traffic epidemic on the short run and to implement a full public transport system on the long run. The mayor of Beirut denied the claims that this would lead to the displacement of Ashrafeh and Rmeil residents because compensations were given years ago and their residency is illegitimate. The highway is designed as follows: A bridge and underpass at the intersection between Saint Demetrius and Charles Helou avenues and a 250m tunnel near Hekmeh School which would have green spaces above it.

Moreover, Professor Bilal Hamad denied the allegations that the highway would lead to the division of Ashrafeh district into east and west and explained that the streets of Rmeil and Mar Mkhayel will not be altered.

“We cannot wait for fifty years for the government to solve this problem,” Hamad continued “that’s why we as a municipality took the initiative.”

The project is estimated to cost 60 million dollars for building the highway and an additional 15 million dollars to construct parking places under the highway at three locations: near the Maronite Archbishopric, after the intersection of Salah Labaky Street and near Electricité du Liban.

“I admit that there is a conflict between heritage and development,” Hamad said. At the end of the lecture was a question and answer session. Rami Alouta, Landscape student, argued that the municipality is working on this project without taking into consideration the opinions of the Ashrafeh citizens. Alouta mentioned public meetings held by the city council in UC Berkeley to gather the opinions of the citizens on projects and wondered why this is not done in Lebanon. Alouta went on to criticize the lack of bicycle lanes which discourages people from commuting by Bicycles. Dr Hamad addressed the Bicycle lanes issue by claiming that the municipality is working on widening the roads to accommodate for bus lanes, however the process will be timely due to governmental constraints.

Some students doubted Hamad’s claim about the buildings that will be destroyed not being cultural, claiming that the pictures shown to the public by the municipality do not accurately display neither the heritage that will be destroyed such as streets of Gemayzeh and Mar Mkhayel nor the green spaces that include the orchard in Mar Mkhayel.

Dr Ghassan Chehab, civil engineering professor in AUB, said that because this project is necessary to minimize traffic and facilitate the lives of many citizens it is acceptable to sacrifice “a tree and a house” on the way.

In an interview with CES News, Dr. Maya Abou Zeid said that the problem of traffic in Beirut could be solved in others ways other than the highway. “On the supply side, we have improvements in the public transport system and investments in cycling and pedestrian infrastructure,” She continued, on the demand side, encouraging carpooling and increasing parking prices to push citizens to use public transportation rather than private cars.
Overflowing are the burial grounds,
Carcasses line the streets,
Old, Young breath their last breath,
There is no stopping the war machine.
Sounds of bombs and bullets signal its approach,
Its fumes reek of burnt flesh,
No amount of blood will quench its thirst,
All will weep.
A dying child promises to tell God,
The atrocities he has witnessed,
Yet he knows not Heaven is turning away the souls.
God’s dining table is already full tonight,
Armageddon takes hold.

Author’s Notes: The writing of the poem was inspired by the last words of a 3 year old Syrian boy who died in the now 3 year old conflict; “I will tell God everything”. The poem highlights the evil of war and it is open to interpretation.

The men watch the hills as they burn,
Their shadows dance in the light of the fires.
They chant to the sounds of crackling wood,
They trace their dreams with the rising clouds of smoke.
Some people gather to grieve for the dying trees,
Yet the trees stand defiant as the fires engulf their branches.
With their dying breath they foreshadow the end of man,
In unity they declare,
It is not us you should weep for, Weep for your sons and daughters,
For the man that cannot see the thorn in his own eye,
Has yet to pay his share.

Author’s Notes: The writing of the poem was inspired by the fire that destroyed 5 kilometers of forests in the Betchay-Baabda area on the 6th of May, 2014. The deliberate arson of woods in Lebanon has taken its toll on the country’s environment whereby serious measures should be taken to prevent the loss of what little greenery is left.
FUN AND GAMES

Can you find the hidden movies? They may be horizontal, vertical, diagonal, forwards or backwards.

ACROSS
1. Come into existence (9)
2. Profit (4)
3. Country (6)
4. Moderate (9)
5. Performer (5)
6. Pig pen (3)
7. Rotund (9)
8. Downhill ski race (8)
9. Lance (5)
10. Make a request (3)
11. Hard work (4)

DOWN
1. Desert plants (5)
2. Entice (5)
3. Paddles (4)
4. Pupilist (5)
5. Brass instrument (5)
6. Wood file (4)
7. Magical incantation (5)
8. Last letter of the Greek alphabet (5)
9. The history of a word (9)
10. Sepia (9)
11. Tergiversation (6)
12. Negligence (7)
13. Lamentables (7)
14. Sinister (7)
15. Prochemotaxis (12)
16. Anarchist (11)
17. Biogas (11)
18. Theatrical apparatus (12)
19. Philosopher (10)
20. Theorist (11)

STAFF

CHAIRPERSON
Dr. Mutasem Fadel

CES ADVISERS
Dr. Majdi Abou Najm
Dr. Ghassan Chehab
Dr. George Saad

EDITOR IN CHIEF
Ghida Ismail

STAFF WRITERS
Frederic Abou Jaoude
Christelle Al Haddad
Anthony Daou
Lynn Farran
Ellen Francis
Lamis Houssami
Maher Said

DESIGNER
Joanna Zeenny

REFERENCES
http://www.puzzlechoice.com/pc/Sudoku_mp1x.html
http://www.puzzlechoice.com/cw/Quick01x.html
http://www.puzzlechoice.com/pc/ws_build_itx.html