EDITOR’S LETTER

A welcome back to our old students and professors and a warm welcome to our new additions! For this Fall issue of ‘Civil News’, we have decided to put together a new look and provide articles more relevant to the CEE’s students extracurricular activities. At the end of day it is the student body under the CES that put their energy towards entertaining the students and relieving them from their stress of university.

With many events taking place during the semester, it is easy to forget that academia is what joins us together. The American Engineer Charles F. Kettering once said, “high achievement always takes place in the framework of high expectation.” It is not a secret that our program demands a lot of time, effort and thinking from us, but it is this ‘high expectation’ that pushes our boundaries and helps us achieve more.

I hope that being a part of the CEE department shows you that it is possible to find the time to study as well as enjoy your personal time with your friends. Never delay or postpone what needs to be done and with meticulous organization you will find the time to do anything you wish. Keeping this in mind, I wish you all a prosperous and fulfilling year!

-- Kristina Stephan

CEE ALUMNUS LETTER

Going to school at AUB and obtaining a degree in Civil Engineering during the war was an interesting part of my life. Studying was tough at times, when survival is what’s on one’s mind, getting food, water, hiding from falling bombs or taking a test when choppers are landing on the green field next door. Well, it wasn’t all about war, we bonded, had fun during the Arts and Science and Engineering games, or hanging out at West Hall was always great. I spent a year on crutches, which made part of my experience challenging, but made me appreciate and understand what handicapped people go through. I moved from Beirut to Orange County, Southern California in 1988 and have spent my time working first in the private sector for 5 years, then joined the public sector where I found my passion.

I started with Capital Improvement Projects at the City of La Habra, and discovered a passion for Geographic Information Systems (GIS), so I went to Cal Poly Pomona where I learned all about it. Then discovered another passion that started from my scuba diving days in Beirut, where the sea was always polluted, so I began my journey into environmental engineering.

From Capital Improvement Projects, I moved into another city, Westminster, where I became the Development Engineer and GIS manager. My job was to review all new developments in the City. I also developed a GIS masterplan for the City and implemented a GIS system for staff. My experience in stormwater engineering, floodplain management and environmental engineering kept growing, and I eventually took a position at the City of San Juan Capistrano as a Senior Civil Engineer, overseeing the environmental division. As part of my duties, I developed an implementation plan to protect the City’s 4 creeks from stormwater pollution caused from development, construction, commercial and industrial activities and started educating the public on protecting the environment. I joined the US Green Building Council and became a LEED Accredited Professional, and was a member of the outreach committee, promoting green building and sustainability, and developed the City’s Green Building Program. I serve as a Board member on the San Juan Capistrano Ecology Center, promoting sustainability and ecological balance in the Community.

I joined the American Society of Civil Engineers as the Chair of the Government Relations committee, educating members and lobbying legislators into various legislations supporting infrastructure improvements and funding. I currently serve as the President of the ASCE Orange County Branch. I have recently received the California ASCE Community Service award for giving back to the community and working with non-profit to promote a better world for all. I was informed this week that I received the ASCE national Citizen Engineer award recognizing me for my passion and dedication to promote civil engineering in a positive way and to support and work closely with the public, legislators and non-profit. I will be receiving the award in February.

Last year, I assisted the Kingdom of Jordan in partnership with USAID in developing environmental regulations to protect their natural resources and the environment from pollutants resulting from commercial and industrial facilities. I trained the Ministry of Environment staff and provided a lecture to local government staff on good ways to educate and enforce. Earlier in the year, I joined a US delegation to Egypt, as a representative of USGBC and helped launch the Egyptian Green Building Council.

When I visit Lebanon, I always dedicate at least a day to visit AUB, and this past year I was happy to see many of my alumni friends. Studying during the 80s might have been tough, but the foundation that AUB provided me with helped shape my life, and I am very appreciative of the entire experience.

-- Ziad Y. Mazboudi, PE
AUB CE, Class of 1987
Dr. George Saad Joins the CEE Department

The most recent faculty members to join the CEE department this year, is also surprisingly the youngest in all of FEA. Dr. George Saad has always known that Civil Engineering was what he wanted to major in. It was an early fascination with structures, which drove him all the way to attaining a Ph.D. in Computational Mechanics from the University of Southern California, USC.

Dr. Saad graduated from LAU Byblos in 2003 with a Bachelor in Civil Engineering with High Distinction. He received a scholarship from The Johns Hopkins University to continue his Graduate studies. There, he met a professor who engaged him in the fields of numerical modeling and uncertainty quantification with Structural Engineering applications. After a year and a half at Johns Hopkins, the research team moved to USC and Dr. Saad followed to attain his Ph.D. Structural Engineering. He did not return to Lebanon immediately after he attained his Ph.D.; instead he worked as a consultant for four years at ‘Moffett & Nichol’. Knowing all along he would eventually return to his home country, Dr. Saad decided to come back to Lebanon, and ‘when it comes to Lebanon, what’s better than AUB’?

On a different level, Dr. Saad has been enjoying his stay at AUB so far. Teaching has turned out to be less burdening than consulting and therefore a more pleasant experience. On the long run, he aims to encourage the research field in the department of CEE and to strengthen the Ph.D. program at AUB, so it can reach higher levels.

In addition, on the personal level, Dr. Saad enjoys reading philosophy, politics and novels (The Black Swan by Nassim Taleb and The Kite Runner by Khaled Hosseini are two of his favorites). He also enjoys bird hunting and travelling. At LAU, his favorite course was Mechanics of Materials (CIVE 310), which he is currently teaching. His least favorite was Qualitative Chemical Analysis. Moreover, his hometown is Deddeh El-Koura and has a younger brother who is a Mechanical Engineer.

“Stay focused, set your goals, and go all the way to achieve them”, for that way, you set up milestones and attain them one by one, each one bigger than the next, he advises his students. He also emphasizes on the importance of exposure to research during undergraduate studies, for its importance later on and for the soft problem solving skills it helps one develop.

We would like to welcome Dr. Saad to our department, and hope his aims of strengthening the Ph.D. program at AUB are realized soon.

Fall Course: CIVE 310
Spring Course: Finite Element Methods (Graduate)
## The CES Cabinet  
*By Emile Zankoul*

Date: 14th Oct. 2010  
Election Time: 9 am – 5 pm  
Results Time: 6:30 pm

**ENGINEERING 1**

- **Jimmy Tannoury** (32 votes): Advertising & Publication officer  
- **Ramzi Taybah** (38 votes): Public Relations officer  
  Fouad Zoubeir

**ENGINEERING 2**

- **Marwan Sarieddine** (by default): Public Relations officer  
- **Christopher Sassine** (by default): Secretary

**ENGINEERING 3**

- **Hassan El Hajj** (by default): Vice President  
- **Carl Abou Samra** (by default): Treasurer

**ENGINEERING 4**

- **Guy Bou Lahdou** (30 votes): Record Keeper  
- **Mohammad Yatim** (43 votes): CES President  
  Aline Daoud  
  Lisa Bitar

## The SRC  
*By Kristina Stephan*

Date: 24th Nov. 2010  
Election Time: 10 am – 5 pm  
Results Time: 7 pm

**ENGINEERING 1**

- **Edwina Tanios** (151 votes)  
  Fouad Saba  
  Mohammad Doughan

**ENGINEERING 2**

- **Emile Zankoul** (140 votes): Secretary  
  Firas Haidar  
  Patrick Obeid  
  Taher Masalkhi Farsoukh

**ENGINEERING 3**

- **Fady Fadel** (151 votes): President  
  Abdel Kader Itani  
  Hussein Kassem  
  Hassan Bitar

**ENGINEERING 4**

- **Abdallah El Skaff** (118 votes)  
  Nadine Bitar Ghanem  
  Ali Kobeissi
Another successful Christmas edition of “Happy Hour” has once again been organized by our CES. With a turnout of students and teachers greater than ever before, more opportunities have been created for us to mingle between one another. The usual room, Wing D, hosted the gathering on Tuesday, December 14, 2010 at 1:00pm. The highlight of the hour was the performance by the ‘Choir Club’ at AUB. Over ten members commenced the Happy Hour with Christmas carols encouraging many students and even teachers to join in on the singing.

After the spirit of Christmas filled the room, roaming around one could hear all sorts of topics of discussion. From internship dilemmas to exams and projects stress, grades to winter travel plans... nothing was held back. Not only where these talks among students, but the relaxed environment made it comfortable for students to approach faculty members and share their stories.

Finally, perhaps the part that attracts most students (aside from the opportunity to skip classes) is the sharing of food. The delicious chocolate cake was catered by Socrates as well as the festive ‘Buche’ cake, that accommodated the Christmas theme. Dr. Ayoub was invited to cut the cake as the celebration of the Happy Hour continued. At the end of our escape hour from the burden of classes and studying, after having drank, eaten and talked too much, we all sadly had to return to the classrooms and libraries we call our ‘second homes’.

U.N.I Help

At first, you may think that the name of this club is just another ordinary name: university help. But try to read each letter separately: U N I Help. The name changes to something more exciting: You And I help. Anthony Massaad, the founder of the club, also a fourth year CE student, said “you can find all kind of clubs at AUB, but U.N.I help has a new and different concept”. In fact the basic objective behind U.N.I Help is to make it a charity based club for raising money through events and donating it to organizations that are less known than others. “We help those who are forgotten,” explained Anthony. The club was created this semester and already including 35 active members from different faculties. Maya Abou Zeid, a faculty member also of the CE department acts as the advisor.

Most students at AUB are ready or willing to help but don’t generally have the time for commitment. This club changes this perspective because all it takes is a small contribution sufficient to create miracles. Being simple and efficient is the whole secret. The first fund raising event organized was a huge success. The theme was a Halloween party hosted at the pub ‘Lavish’ in Gemayze, on the 20th of October. Decorating the place with pumpkins, ghosts and spiders was all done to set the mood. Phantoms, witches, vampires and many other interesting or even frightening characters came from AUB as well as other universities. All the efforts combined successfully helped make a net profit of 1000$, with plans to use this money towards helping two families by buying them supplies they may use in their home or even help by providing a service of repairing necessary parts of their home as wall.

U.N.I help has many other projects in progress. For example, one of the members of this club (also a CE student) has a neighbor who is taking care of twelve orphans. U.N.I Help and its members plan on surprising the children with gifts in time for the holidays. This is another opportunity at hand to provide for the less fortunate and will be done through organizing a Christmas dinner to raise money. This is just one example of the many plans in stall of the club. We wish Anthony and his team success from the CE department and we hope many of you are encouraged to help others in all ways possible.

Happy Hour: “Welcome Edition”

This year, our newly elected Civil Engineering Society kick started the academic calendar of events by the annual “Happy Hour”, an event where students and faculty members get to know each other in a friendly atmosphere. On Thursday the 28th of October, a gathering between many students and members of the CEE department was scheduled on the Bechtel terrace from 12:30 p.m to 2:00 p.m. The attendees socialized with each other while enjoying burgers, donuts and beverages on the terrace, provided by the CES members.

Additionally, the event included a stand for the Saint Jude Children’s Cancer Center, which was placed on the terrace to promote awareness and allow donations to the center. The hour and a half long “Happy Hour” definitely gave everyone, especially new students, the opportunity to embrace the beginning of a new “Happy Academic Year” and to get better acquainted with fellow engineers and faculty members.
Since AUB Engineering students are required to take several courses during summer, relatively little time is left for them to take advantage of their vacation. This is why making the most of it is a necessity. This mission was perfectly accomplished, thanks to the Civil Camp! The CES, in collaboration with IBSAR and the CCECS, organized its traditional summer camp to take place over the last week of summer, from the 15th till the 23rd of September, hosted by the Agricultural Resources Educational Center (AREC), also known as the AUB farm located in the Bekaa.

A total of 85 students attended, all coming from different majors and years. As for the majors, the Civil Engineering students were dominant, but there was a mixture of EECE, Mechanical and Chemical Engineering, Philosophy, Biology and even Medical lab students. Not to be forgotten, the extra exotic addition to the group were three Costa Rican Agriculture Graduates from EARTH University, aged 27, completing their internship in Lebanon through AUB.

The main goal of the camp was to carry out community projects in order to help municipalities around AREC. Each day was very well organized, with each morning starting at 7:30 AM breakfast in the facility cafeteria. The menu consisted of omelets and boiled eggs or croissants and everyone’s favorite, knefe. Eating was essential since the next seven hours were all about work. The tasks were distributed to five groups of students, each sent to a specific village where there were projects to be completed.

In Baalbek, the objective was to build access ramps for the physically challenged. In Shmistar, a bus stop was built using bricks, cement and paint. The sidewalk rails were also painted in blue. In Taanayel, an environment-friendly mud house was built for the Arc-En-Ciel organization. Moreover, students created a website for the municipality of Bedneyel. Last but not least, Irsal! This village was different from the others since it was the furthest from AREC which meant that the small number of students who worked there, also slept in Irsal. The work consisted of building a playground containing benches decorated with mosaic. Computer lessons and a photography workshop were given to the people of Irsal. Finally, a festival took place with the community of Irsal to celebrate the completion of the tasks. There was also in-house work with IBSAR in AREC.

All those activities were very beneficial for the students as they taught them a lot, whether it is experience with work in the field or the efficiency of group work. Most importantly, the group learned how volunteering and helping others could be fun, important and interesting, all at once! The students got the chance to meet and get closer to each other, making the work easier and the journey fun and memorable. Activities were not only limited to projects, labor and community service. A lot of time was spent enjoying fun moments. Entertainment was divided into two parts: the one in AREC and the outings. The first category consisted of a game of rally paper full, a cozy fire camp around which the group gathered and sports tournament such as basketball and football. As for the outings, they took place during the weekend. Saturday night, the team went to Zahle where they had a Lebanese dinner at the Berdawni after which they enjoyed a little game of bumper cars, reminiscing their childhood! After that, it was time to party as some students spent the night dancing in Zahle. Sunday started with tourism in Baalbek followed by a visit to Chateau Ksara. After lunch, it was time to visit the Qaraon dam/lake where the students enjoyed the beautiful view.

The last night in AREC, a reception was made for the participating organizations and for the mayors of the regions where the services were done. This reception consisted of speeches prepared by some of the students, along with CCECS’ director Dr. Mabsout, and a play of “Bab El Hara”, dabke, and songs by the scouts and students of Bedneyel that entertained the viewers.

Finally, it was time to say goodbye. All the students gathered in a room to complete an evaluation, with many students expressing appreciation of the camp, and as some stated that it was an unforgettable experience. At noon, three buses were ready to take the students back to AUB, then back to their homes to rest during their last weekend before starting another academic year.
**The Civil Engineering Society**

For those of you who don’t already know, the Civil Engineering Society (CES) is a society for the CEE students at AUB, aiming to unite all students through a range of interesting events in a non-academic environment. It groups all interested students belonging to the CEE department and is represented by a cabinet of eight members elected yearly, two from each class. The cabinet positions are: President, Vice-President, Treasurer, Secretary, Record Keeper, Advertiser, Public Relations and Photographer.

All students, whether members of the cabinet or not, have the chance to be active in the society. In fact, they have the opportunity of contributing through the several sub-committees that are formed during the year for specific events or projects.

The CES’s activities and intensity have increased considerably in the last few years. Its activities are diverse, ranging from social events such as dinners, outings, camps, ski-trips to humanitarian projects like tree planting and last but not least, academic assistance to the students with civil related software (Primavera, AutoCAD) sessions.

It is highly advised that all students, sophomores or returning students, take part in this society and become active members, because it is a society by the CEE students, for the CEE students. Don’t hesitate to check the department and your Imail throughout the year to stay updated with all the CEE department and CES news. Don’t forget to check out the CES website at:

http://webfea.fea.aub.edu.lb/fea/ces/

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**The Hottest Course You Can Take in Summer, Literally!**

There is only one course in AUB that is available just during the summer semester. Only one requiring the campus to be filled every afternoon, with students working for hours in the sun, with sophisticated instruments. Only one course during which mixing business with pleasure is an option, getting a perfect tan whilst learning the ways of Civil Engineers! This course is CIVE 360, also known as surveying, the art of determining the relative position of points, also known as stations, above the earth’s surface. It is a 2 or 3-credit course for Civil and Construction Engineering students respectively, administrated by Mr. Halim Nader. It consists of three hours of weekly lectures along with three hours and a half of fieldwork that students constantly complain about because of the fact that they have to fry under the rays of the burning sun! Despite this inconvenience, one may learn to enjoy it since it is the only outdoor course. It is an opportunity for the students to take advantage of the sun’s healthy vitamin D, while working and learning at the same time! Regardless, surveying will definitely leave its mark on every Civil Engineer’s summer because it is the core step of developing any project in construction!
The DJ switched to party tunes and the dance floor overflowed with energetic students. After a very enjoyable night, each guest left with a stuffed polar bear souvenir. Dr Manal Moussallem, from the department of civil and environmental engineering said: “The event was very warm, people were joyful and enthusiastic. The initiative should be promoted and encouraged because these events create close ties between students and bring people together.”

The dinner was organized by the CES (Civil Engineering Society,) the FEA-SRC and the I-EEE (Institute of Electrical and Electronics Engineers.) It was sponsored by the CCC (Consolidated Contractors Company) and covered by Beiruting.com and Mondanité Magazine. Christopher Sassine, CES secretary said “It was a very hard event to organize, but we enjoyed every bit of it. And it was great to see everyone having fun at the end of it all.” Emile Zankoul, FEA-SRC secretary added “We worked really hard for this event, and fortunately, as you see, it paid off! This annual Christmas dinner is one of the most important events every year. It has become an FEA tradition, and once again it turned out to be a huge success thanks to all those who put their effort organizing it and of course to all those who attended! Without them, the event wouldn’t have been a success. Finally, I’d like to assure you that this is not the last successful event that will be taking place this year, just wait and see!”

A Personal Account: ‘FEA Christmas Dinner’
After having attended AUB for the last two years and being a member of the FEA, I felt the necessity to attend the Christmas dinner this year that took place on the 21st of December at Crowne Plaza. Every year, this dinner is well organized by the students with a lot of motivation, and tickets are sold out as expected because of the annual success of this event. Knowing this made me curious about the dinner and pushed me to attend it with my friends. So we reserved a table and bought our tickets, waiting with anticipation to see the dynamic of teachers and students put in a social atmosphere. Once we arrived, we gathered together, whether colleagues and/or professors and had dinner discussing the widest range of topics. Later on, after having a drink or two, the dancing began. The funniest thing was to see the students the day after running to attend classes and trying to be on time to avoid missing “attendance”. What I liked the most about this dinner was its ability to bring all the FEA students and teachers together, allowing you to spend some quality time with people that you meet everyday but might not get the chance to see or talk to outside Bechtel. I promise that next year, I’ll be the first one attending this dinner and convincing my friends to go with me!!
Three of Downtown’s Current and Existing Towers

Platinum Tower
- Contractor: Arabian Construction Company (ACC)
- Consultant: ARUP (London, UK)
- Height: 153 m (tallest in Beirut)
- Floors: 34
- Cost: US $200 Million
- Completion Date: 2008

Beirut Terraces
- Contractor: Arup (London, UK)
- Consultant: Arup (London, UK); G/ECS (Lebanon)
- Height: 120 m
- Floors: 26
- Cost: US $500 Million
- Completion Date: 2013

Versace (Damac) Tower
- Consultant:
  - International: Valode & Pistre Architects
  - Local: ERGA Group
- Floors: 28
- Cost: US $150 Million
- Completion Date: 2013
- Award: “Best High Rise Architecture” in Beirut

**Prepared by Diane Aoun**
CROSSWORD

Across
1 Changeable (8)
5 Circuit (3)
6 Drink made from apples (5)
7 Afresh (4)
9 Barrier (4)
13 Brush (5)
14 Pole for rowing (3)
15 Retriever dog (8)

Down
1 Holiday home (5)
2 Indian currency unit (5)
3 Curved structure (4)
4 Build (5)
8 Support for a handrail (5)
10 Audibly (5)
11 Mistake (5)
12 Spiked wheel on a boot (4)

CIRCLES

SUDOKU

*Sudoku Source: http://www.printsudoku.com/print-sudoku-2019.html*
*Game Source: IQ grow your mind by Philip Carte*
ENGINEERING JOKE

Three Civil Engineering companies decided to work together on an important typical project: building a bridge! During their first meeting they discussed the distribution of the work. They agreed that the first company would be in charge to provide the project with asphalt. The second company had to bring concrete. And finally the last one had to bring steel. After two years of work, the bridge was finished. It took it only a few minutes to collapse!

So the CEO of the first company said: “Oh no! All that asphalt, it’s gone for nothing!” The CEO of the second company screamed: “No! All the money spent on that beautiful concrete, it’s lost!” Finally, the last CEO proudly said: “Thank god we forgot to supply the steel! Or else it would’ve been gone to waste.”

ABOUT CIVIL ENGINEERING STUDENTS

They should have a lot of force because they are always under stress, which creates tension with their friends. This is only normal for them as members of the department, because at any moment, teachers are susceptible to give homework depending on their elasticity. Sometimes, teachers are tough and rigid which pushes grades to be fully fixed making it hard for students to get themselves off the Hooke. Finally, they all can’t wait, even if it’s subjected to compression, for the spring break to relax.

COMIC STRIP

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YOU KNOW WHEN YOU’RE A CEE STUDENT WHEN...

...you’re always late when it comes to studying and you seem to be studying forever
...people hate you in free elective courses because you are known to increase the average
...your life depends on the raise
...at the end of each semester you promise yourself that the next semester you’ll be studying daily
...you always compare real life situations with what you learn in class and vice versa
...coffee becomes the most important meal of your day
...you think “Spring Break” is a metal fatigue failure.
...you tell other people that your life is much harder than theirs (especially Business students)
...doing a homework means finding a source to ‘steel’ it from
...you find your electives more difficult than your major classes
...you laugh at jokes that no one else understands
...sleep is no longer a priority and overnights become a habit
...you love the feeling that I can’t understand a thing from what I’m reading
...you feel you’ve already enjoyed my life enough
...you can’t live without tension
...you love taking risks & regretting them later
...you love skipping vacations & are forced to take summer courses
...you can withstand 4 quizzes & 5 assignments submissions on the same day

"Prepared by Emile Zankoul"
We want to hear from you! Send us your news (recent publications, honors, promotions…) with photos to: civilnews@aub.edu.lb

“Statistics were prepared by Emile Zankoul

YOUR FEEDBACK, SUGGESTIONS, COMMENTS, AND CONTRIBUTION ARE WELCOME!
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