Dear BMES members,

I hope summer has treated you all kindly, and that you're all relaxed and rejuvenated for the impending school year. As this year's BMES president, I would like to welcome back all our returning members. I am grateful that you and all of our new members find our services valuable. We hope to help you find your niche in the vast field that is biomedical engineering, while introducing you to some lifelong friends.

As many of you are aware, our local BMES chapter is also associated with a national BMES organization. As a reward for our outstanding service to our local community, we have been honored with the Meritorious
Chapter Award by the National Biomedical Engineering Society. We plan to continue this tradition and ensure that the classic events - such as Lunch With Faculty, Lab Tours, Grad Life, Research Fairs, Bowling Nights, and our quarterly newsletters - remain as an integral part of our club.

Looking to the future, we aim to give many new opportunities for BMES members to become involved in our club, beyond attending our events. In addition to our Newsletter Committee, we will also focus on outreach ventures that will connect with the youth of Davis and inspire them to pursue career paths in science and technology. Furthermore, the BMES aims to bring more industry opportunities to campus by offering tours of industry facilities and inviting industry representatives to visit UC Davis.

Additionally, the BMES will be hosting its first imaging conference this spring, featuring both professional and graduate student speakers from the northern California region, opportunities to make industry connections, and student poster sessions. I invite all of you to be a part of this conference, either by attending or participating in the conference, assisting to organize the conference, or aiding our officers to invite speakers.

I hope to see you all at our the events that we’re holding this quarter. I wish you all a fruitful year, and I hope to see you at the many upcoming BMES events.

Sincerely,
Varsha Viswanath

LETTER FROM THE EDITOR

Hello!

My name is Christian Pascual, and I am your 2013-2014 BMES Editor-In-Chief. I’ve been with the BMESsenger crew since its birth in 2011, and I’ve seen its growth from a five article document to an esteemed newsletter. I’m here to continue its growth and expand its horizons for the good of the BME undergraduates.

I know that as a BME, it’s easy to get caught up in your engineering classes and lose sight of what the world is like outside of everyday calculus and physics. The BMESsenger is designed to enlighten those interested in what both the UC Davis BME department and the BMES at UC Davis have to offer. We do articles of all kinds, targeting the various

Your 2013-14 Editor In Chief
postgraduate routes that biomedical engineers have available to them, ensuring that none of the diverse groups of our BME department are neglected.

For this summer issue, we delve into the different experiences that you can have during your summer away or at Davis! You may have stuck around and taken classes over the summer, or perhaps you left and did some research elsewhere! In any case, you can learn about all your fellow BMEs’ experiences and thoughts here!

**THE 1ST ANNUAL BMES IMAGING CONFERENCE**

*BY: CHRISTIAN PASCUAL*

Coming in as a freshman Biomedical Engineer in 2011-2012, I never expected to be a part of the BMES at UC Davis, nor did I expect the club to explode in the amount of things it offered in my short time here. I’ve seen the birth of new committees, new officer positions and new events, but now, the BMES is bringing what might be the first event of its caliber to UC Davis: an Imaging Conference. This conference intends to bring together academia, industry and students with the purpose of creating networking opportunities and showcasing the applications of biomedical imaging.

The name of the conference is “From Mice To Man,” intends to highlight the significance of imaging to research and clinical settings. The conference will take place all day in the Genome and Biomedical Sciences Facility (GBSF) and will adhere to a fluid schedule of talks from academia, poster presentations and free time to eat and explore the various booths set up by our conference sponsors. Attendees will even have the chance to see our very own Center of Molecular and Genomic Imaging (CMGI) in scheduled tours.

The 2013-2014 BMES President Varsha Viswanath is the brainchild of the conference; along with Professor Simon Cherry, she leads a new Imaging Committee that commands and organizes all the fundraising, program and logistics of the conference. This new committee was established near the end of the 2012-2013 academic year, and has worked through the summer to develop the conference.

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**INTERVIEW:**

**MEGAN HOWES**

*BY: ALAGU CHIDAMBARAM*

As an engineer, we all know how incredibly difficult it is to fit all of our classes into four years. With schedules so busy, studying abroad seems nearly impossible. However, engineering student Megan Howes did a summer abroad program this summer, and shares her experience:

Q: What year are you in?
M: I will be a 3rd year this coming Fall Quarter.
Q: What class did you take this summer? Where did you study abroad? Were you taught by a Davis professor?

M: I took Humanities 180 and 198 for a total of 8 units in one month taught by a UCD professor. I studied abroad in England, France, the Alps, and Italy.

Q: What made you want to take this specific course?

M: Because each quarter is so busy, I wanted to study abroad during the summer. I had never been to Europe before, and “The Grand Tour” of England, France, and Italy sounded like an incredible experience. Besides living in the bustling cities of London, Paris, and Rome, having a portion of the trip in Chamonix-Mont-Blanc was a very unique, well-rounded experience. This specific course allowed me to see and do so much in three different countries, while also earning units that went towards my major.

Q: Did you have to learn a new language? If so, when and how did you learn the language?

M: Nope! I had some background in Spanish from AP classes and mission trips, so Italian was easier to learn while abroad. But I knew absolutely no French. I would just point to things on the menu and smile. But, it was definitely manageable and fun to try and say things I had no idea how to pronounce. It was also super helpful that our professors were fluent in French and knew some Italian, so they were always there to translate for us.

Q: What was the hardest part about studying abroad? The best/most fun?

M: The hardest part about studying abroad for me was probably navigating through all the different cities, especially with street signs not in English. I’m a little directionally challenged and we changed places each week so once I was finally getting the hang of it, I had to start all over again. But that is also what made this trip so exciting and fun. One of my favorite things about my study abroad experience was that we got to visit so many different places, see so many things, and do so much within a single month. Seeing the performance of Macbeth at Shakespeare’s Globe Theater, climbing to the top of the Eiffel Tower and Notre Dame Cathedral, visiting the gorgeous Palace of Versailles, standing inside the Sistine Chapel in the Vatican, paragliding through the Alps, and so much more I can’t even begin to explain. Plus, the food is unforgettable. I definitely stuffed my face with French croissants and Italian gelato whenever I got the chance.

Q: Did you learn anything new about the
me graduate. I definitely recommend taking an Arts and Humanities class abroad to fulfill GE and writing requirements because the level of difficulty allowed me to enjoy the country I was visiting, raise my GPA, and helped me graduate. Also, a study abroad program over summer was very easy to integrate into my schedule because it occurred only for a month, and after I was still able to take an engineering class over Summer Session II.

It definitely takes some extra planning, but being an engineering student doesn’t necessarily entail sacrificing the parts of college life many of us looked forward to when we were younger. As fellow student Megan points out, it’s a great way to experience the world and gain a new appreciation for what you learn, while earning units that count towards your major.

INTERVIEW:
COURTNEY GEGG
BY: ALEXANDER SUMMERS

Courtney Gegg is a fourth-year biomedical engineering student focusing on biomechanics. We recently interviewed her about her research experience at UC Davis and now we sat down with her and asked her about her research over the summer. She had the opportunity to continue performing research this summer in an REU program.

Q: Tell us a bit about where you worked and your position:

C: This summer, I participated in the National Science Foundation (NSF) Research
Experience for Undergraduates (REU) at South Dakota School of Mines and Technology. I worked as a researcher in the metallurgical engineering department.

Q: Can you give us an overview about what you have been working on?

C: In replacement surgeries, such as total hip and total knee replacements, titanium metal is used as the biomaterial to replace bone. However, the titanium implant often becomes loose from the bone, leading to implant failure. Because of this, the goal of my summer project was to improve the osseointegration between titanium and bone, by making micro-scale and nano-scale surface modifications to the metal.

Q: How did you find out about the position?

C: Through the NSF website.

Q: What do you like most about your internship?

C: I really enjoyed working so closely with my professor. UCD is a big school, so often times it is hard to have one-on-one interactions with a professor. The school I was at is much smaller than Davis, so I got to interact with my professor on a daily basis, which allowed us to get to know one another, figure out each other's work habits, and really helped facilitate a strong and enjoyable working relationship. I also had the privilege of mentoring a high school student, which was probably the most rewarding aspect of my summer (other than my research outcomes!). I really enjoyed teaching her about study designs and how to write a research paper, but most importantly, I enjoyed passing on my enthusiasm for science and research to her...because of this summer, she is now planning to major in the sciences!

Q: What would you say is the most challenging aspect?

C: For me, it was hard to move to a new place, with new people, and a new research project and get comfortable in a 10-week period. That was also one of the joys of the experience...doing something different, living somewhere new!

Q: Have you done research on campus?

C: Yes, I currently work as an undergraduate researcher in Dr. Athanasiou's tissue engineering lab.

Q: What would you say is the most important thing you have learned this summer?

C: I realize that choosing which professor I work for in graduate school is an extremely important decision: I could research something entirely fascinating, but without a professor I work well with, my graduate school experience could be a huge drag.

Q: Do you have any advice for other students who are looking to get a similar internship?

C: Apply early! It's hard to start thinking about summer positions during Winter Quarter, but many REU programs have deadlines in January!
The cells in our body are constantly strained by mechanical forces. As our hearts pump, those cells experience tension before relaxing. As we walk or run, the cartilage at our joints endure shear and compression. The conversion of mechanical stimuli into chemical reactions is a biological process known as mechanotransduction. This process plays a key role in determining cell shape, motility, proliferation, adhesion, and tissue organization and function. However, the exact internal machinery involved in responding to external forces is not well understood. In the Yamada Lab, we focus on the analysis of mechano-sensitive proteins at the interface of neighboring cells and the extracellular matrix.

This summer I began my project by applying the method our lab uses to test for mechano-sensitivity in proteins. Previous students (such as BMES officer Rachel Gurlin) have developed a device that stretches a flexible cell chamber. The epithelial cells are plated onto the surface of the flexible chamber and as the chamber stretches, the adherent cells are also stretched. Using a confocal microscope, I monitored the protein’s response to stretch and observed any stretch induced changes to its localization.

After multiple trials, I realized that our cellular stretch device could be redesigned to better optimize the amount of protein recruitment in our results. For example, the degree and speed of stretch are key parameters for mechanotransduction. Using the skills I learned in Engineering Graphic Design, called ENG 4 here at UC Davis, I drew up a new device that was suitable for a wider range of stretch chambers, allowing it to run a greater variety of experiments. I also decreased the amount of motor vibrations that often interfered with imaging.

Extensive study of other devices on the market helped me realize that the newly developed prototype in our lab was much more economical than current devices on the market (around five thousands dollars). Keeping Dieter Rams’ Ten Principles of Good Design in mind, I made our device cheaper to produce (around five hundred dollars), easier to use than other devices, and more aesthetically pleasing than it was before.

Many labs are attempting to develop an approach to research mechanotransduction because it is essential for a wide range of responses in our body, from transforming the pressure on our eardrums into sound, to signaling for cancer metastasis. I see a unique opportunity to move my research and engineering out of the lab, and into the world. The
first step I am taking is to introduce the device at the UC Entrepreneurship Academy, a three-day intensive program to help researchers make their innovations marketable.

My experience this summer taught me that undergraduate research is not limited to technical laboratory work. There are ample opportunities to expand ideas outside of the lab. BME students can also contribute to other topics such as regulatory issues, patents, healthcare, and marketing. My summer project opened my eyes to another potential career option and that is why I highly encourage others to also do research.

**INTERVIEW: DYLAN ROGERS**

**BY: ALEXANDER SUMMERS**

*Dylan Rogers is a fourth-year biomedical engineering student focusing on medical devices. He obtained a great internship for this summer and I had the chance to interview him about his experience.*

Q: Tell us a bit about Stryker and your position.

D: I work for a company called Stryker Neurovascular. Here we make different medical devices to prevent ischemic strokes and brain hemorrhages. These devices include detachable coils used for aneurisms, clot removal systems, and stents. I personally work in the Quality Department on the Complaint Investigation Team. Every time a Stryker product fails in the ER, the physician will send it back for investigation. It is then up to my team to determine why it failed so we can prevent it from happening in the future.

Q: Can you give us an overview about what you've been working on?

D: As an intern I had several projects where I designed new devices that are being used in the quality lab. I mainly worked on 3D modeling new fixtures and then coordinated with manufacturers to produce them. First, I created a new fixture for testing the electrolytic detachment of the metallic coils. Then, I created several fixtures to assist the technicians in taking better pictures with the microscopes.

Q: How did you find out about the position?

D: I heard about Stryker from the career fair on campus. After hearing more about the company, I became interested and applied for several positions online. Four rounds of interviews later, and I ended up at Neurovascular. I would recommend applying for as many
positions and divisions as you can.

Q: What do you like most about your internship?

D: There are a lot of perks of my internship: high pay, free apartment, and great networking opportunities. However, my favorite part about my internship is how flexible the company is. Each day I have to put in a minimum of 8 hours, but it is up to me when I want to work. This is very nice because it works around my schedule. Sometimes I will come in at 7 and leave at 3 or if I want to sleep in, I'll come in at 10 and stay until 7. Another really nice thing about work is that I can keep my personal life and work life completely separate. When I leave work I honestly don't think about it at all until the next day, and that's very refreshing compared to school. At school I am always studying and worrying about upcoming midterms, but in industry there is a fine distinction between your personal and work life. This makes working a lot less stressful and more enjoyable.

Q: What would you say is the most challenging aspect?

D: In my opinion, the most challenging aspect is the pressure to succeed. Everyone I work for is so great and they genuinely respect you and the work you're doing. In my mind, there is a lot of pressure to make them proud and happy with the work you've done. Not only that, but you also want to try very hard to succeed because you can get full time positions out of it. Most of the interns at Stryker are offered full time if they complete all of their projects and work well with their team.

Q: How is working in industry different from an academic setting? Was it difficult getting accustomed to?

D: Well I've already touched on that quite a bit, but I think the main difference between industry and academia is your work schedule. In industry you work straight for 8 or so hours, but at school you have tons of breaks between classes or no classes at all. Working the 9-5 life was definitely hard to get used to at first. After working so many hours, you get incredibly tired after work. However, this gets better over time and the free coffee at work helps.

Q: How has your experience in the BME program helped you? Any specific classes or resources?

D: The main class that has helped me is BIM 189C with Don Chigazola. This class is great if you want to learn how industry works. It has helped me a lot when I have meetings with people in other departments. I can easily follow what they are talking about and I know the right questions to ask to show that I am interested and engaged. This practice might not seem like a lot, but if you can make a good impression then you might just get a job out of it.

Q: Have you done research on campus? Tell us more about it. Did your research help you with this position?

D: Before I started my internship I worked in Dr. Pan’s Micro/Nano Innovations Laboratory for about a year. While researching I worked on making capacitive textile sensors and I got the opportunity to compete in Barcelona for the research I did. My research at UC Davis definitely helped me get my position at Stryker because it gave me experience that I was able to talk about in my interviews. Research also
helped me learn about the design process and time management. Overall, my internship has felt very similar to researching at school.

Q: What would you say is the most important thing you’ve learned this summer?

D: The most important thing I’ve learned this summer is that even if you get your engineering degree, you are not limited to just engineering positions. Many other departments want employees with technical backgrounds so they can understand all of their products better. For instance, if you’re a sales associate with a technical background, then you can really explain how the products work to physicians and other customers. This idea is the same if you were to work in marketing or business departments.

Q: How has your internship experience shaped your goals for the future?

D: My internship experience has completely changed my goals for the future. Internships are great because you can test out what you like and don’t like. You can also have meetings with people from other departments and see if you are interested in what they do. After working on so many research/design projects, I have decided that I no longer want to pursue a job in R&D (Research and Development). I find the operations and business side of engineering to be a lot more interesting. I’m so glad I found this out early because I could have wasted countless years in grad school preparing for an R&D position that I would end up hating.

Q: Do you have any advice for other students who are looking to get a similar internship?

D: If you want to get an internship, definitely make your Linkedin page very polished. I have talked to several recruiters while interning and their entire job is to go on LinkedIn and try and find people to hire. In fact, 30% of Stryker employees are recruited/scouted off of Linkedin. Needless to say, it is very important to seem professional online. That being said, recruiters are also trying to find interesting people to work for them. They are not going to hire someone who seems like a total bore so spruce up your profile and make it unique.

Internships play a vital role in making decisions about a future career path. Not only do they give you experience that can help with resume building, but internships can also show you what part of a company is appealing or unappealing, such as R&D for Dylan. Especially in the medical devices arena, internships are increasingly important as biomedical engineering majors compete with mechanical, electrical, and industrial engineers for similar positions.
INTERVIEW: SHANE AUSTIN
BY: ALEXANDER SUMMERS

Shane Austin is a fourth-year biomedical engineering student who started his career at UC Davis as an electrical engineering major, but then converted to biomedical engineering during his first year. Since his transition, Shane's interest has remained in electrical engineering, but with a biomedical emphasis. I had the opportunity to interview Shane about his summer internship.

Q: Tell us a bit about SunPower and your position.

S: SunPower is a global solar company with the world’s most efficient commercial solar panels. They have an office in Richmond, CA, and I’ve been commuting there three days a week for the past ten weeks. I’m considered a Performance Engineering Intern, and the group I work with is in charge of solar array modeling for short term (yearly) performance.

Q: Can you give us an overview about what you've been working on?

S: I’ve completed several projects throughout my internship, most notably I was tasked with optimizing a portion of their modeling engine. Their model is written in MATLAB, which I was happy to learn since I’ve already been exposed to MATLAB. I also analyzed three years of production data for a small solar array at a test site to provide a comprehensive summary of its production since inception. I’ve also had the opportunity to do some field work, such as installing solar panels and setting up experiments. These experiments are conducted by my team in part to improve their solar array model.

Q: How did you find out about the position?

S: I’m working with my neighbor; this relationship showed me that connections and networking really do pay off.

Q: What do you like most about your internship?

S: I love that I enjoy everything I’m doing. My internship has been versatile, I’ve been involved in several different types of projects, and have been learning so much. I already had some exposure to photovoltaics, and it was really exciting to be able to work on something that wasn’t completely new.

Q: What would you say is the most challenging aspect of your internship?
S: The most challenging aspect has honestly been not getting disappointed when something doesn’t work. I’ve been working on a project for some time now where I think I’m on the right track, only to have it not work and have to go back and revise. This is, of course, such a natural and universal experience, but when you’re surrounded by professionals in the field, it can be intimidating to feel like you’re not getting anywhere.

Q: How is working in industry different from an academic setting? Was it difficult getting accustomed to?

S: I can’t really speak out of much experience, but what I have noticed about this company is the atmosphere. Especially for engineers, it seems like many companies provide a really flexible and easygoing atmosphere, and at the end of the day you put your work down and don’t think about it until the next day. I was a little disappointed to hear that it’s almost unheard of to wear a tie into the office — I guess I went professional clothes shopping for nothing.

Q: How has your experience in the BME program helped you? Any specific classes or resources?

S: In all honesty, I can’t say that the BME program has been particularly helpful from a content perspective, simply because the photovoltaic industry is not really biomedical engineering.

Q: Have you done research on campus? Tell us more about it. Did your research help you with this position?

S: I have done some research on campus. I’m currently working on a model for optical interactions with human tissue. It has mostly been programming the model using MATLAB, which is a skill that has translated exceptionally well to my internship.

Q: What would you say is the most important thing you’ve learned this summer?

S: The most important thing I’ve learned this summer is that assertiveness is an important skill to develop. It seems like the corporate world revolves around impressions, reputations and having the confidence to know what you want or to know why what you’re doing is critical. There are so many opportunities if you let yourself be open to them, but you have to put the time and effort in to take advantage of them.

Q: How has your internship experience shaped your goals for the future?

S: As far as my goals for the future, I feel like I’ve had this impression in my mind that graduate school was a must. I’ve now fully realized, however, that engineers have many opportunities for work right out of undergrad. This knowledge has made me think twice about graduate school. I feel like it ultimately comes down to knowing what you really want to do with your life, and taking a couple years to work and gain experience before going to graduate school is a completely valid (and not uncommon) option.
REU: MY EXPERIENCE AT UCSF
BY: RACHEL GURLIN

1. Start researching. This website that lists multiple programs at many universities: http://people.rit.edu/gtfsbi/Symp/bme.htm

There are a copious amount of programs. To limit the choices, I looked at programs that were at universities I wanted to be at during the summer (Texas heat? No thanks!). In addition, consider universities you want to attend for graduate or professional school because you’ll have the chance to meet with faculty and get to know their program.

2. Make a spreadsheet. I filled in the school, program name, location, program website, number of recommendations needed, stipend provided by the program, application due date, if official transcripts are needed, and any other comments (e.g. if the program provided a GRE class or not). I chose programs that provided housing and transportation to the location (not all do!).

3. Gather supplies. Start early and ask for recommendations at least four weeks in advance. This courtesy gives your recommenders enough time to write good stuff about you! Some programs require only one letter, most require two, and some ask for three. You can apply to a good amount of programs with two letters. You will also need to start writing those application essays.

Rachel in the UCSF lab

During the summer, I had the opportunity to work at the University of California, San Francisco (UCSF) in Dr. Shuvo Roy’s lab as a part of the 10-week Summer Research Training Program (SRTP). In his lab, I tested the mechanical robustness and hydraulic permeability of Silicon Nanopore Membranes (SNMs) that will be incorporated into an artificial kidney. My program included weekly presentations by faculty about their research as well as graduate school admission seminars. In addition, I was able to take a GRE class. At the end of the program, I made an oral presentation and poster; it was valuable to get experience presenting scientific work. I highly recommend doing a program during the summer so here are my suggestions on how to apply:
4. **Complete applications.** Save all of the essays you write so you can alter them for other programs. Always make the essays personalized, with the name of the school and program, as well as names of faculty in which you are interested; it shows you did your homework!

If you have any questions about my experience or need advice on your application, feel free to e-mail me at [regurlin@ucdavis.edu](mailto:regurlin@ucdavis.edu).

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**RESEARCH IN THE FEDERAL CITY**

*BY: CHRISTIAN PASCUAL*

During the summer, BMES President Varsha Viswanath traveled to Washington DC to do some research on biomedical imaging. Here, Varsha talks about her experiences with the program and her thoughts about life in the famed Federal City.

**Q: What program were you a part of?**

V: I was a part of the Naval Research Enterprise Intern Program, also known as NREIP. I participated in research done in a Department of Navy laboratory in Washington DC. The program lasted for 10 weeks, and for that duration, I stayed in a large dormitory which contained its own kitchen.

**Q: What kind of research did you do while you were there?**

V: I did full time research in a laboratory a bit away from the usual Washington DC area. For the first few weeks, I spent my time translating some Fortran code into Matlab. After that, I spent a lot of my time researching magnetic resonance imaging and analyzing raw DTI data in collaboration with a German lab. I helped develop a method for analyzing spatially correlated data with the raw DTI data.

**Q: What skills did you learn from the program?**

V: When I wasn’t in lab, I spent my free time relaxing and exploring the city of DC for what it had to offer. I would go to malls, take walks around the park and see the museum exhibits when I could. On some nights, I would go with my roommates to watch a Dr. Who screenings or go to the park and listen to the various bands that would play in the park.

**Q: Would you recommend this program?**

V: Yes! I would definitely recommend it to anyone interested in image analysis. The program really opens up your eyes by showing you how certain maths you learn in class can be applied to other fields. Admittedly, within our own BME program at Davis, its easy to get caught up in the “medical bubble” and not see how the biomedical discipline can be applied to other things, but NREIP helped give me some perspective on my classes and even my own research.
THE JOYS OF SUMMER COURSES: ONLINE
BY: JASMINE CHEN

I’m sure many of you would be considering taking summer courses as we carry onto this BME path. I’ll say that it may be a wise decision to make if you don’t have any plans for the summer and if you can handle the intense schedule. Any BME field requires students to take plenty of courses, so taking a summer course online is not a bad idea, as long as you plan this summer schedule wisely.

Personally, I had taken a lot of my GE/lower division courses online at a community college during the summer. Online courses help provide a lot of leisure to students who are working, taking up an internship, or if they’re out of the state/country. Most community college summer sessions are 8 weeks long. The tuition for these classes is much, much cheaper, but make sure these units will transfer back to UC Davis. Our own UC Davis is starting to offer online courses, but so far the choices are limited. Summer Sessions here at UC Davis is 6 weeks short!

I had taken my first on-campus summer course during SSI and an online course during SSII. Learning the material can come in many forms for online courses. Some courses have organized and structured webpages that will provide everything you’ll need to learn the material. Other courses may not be as organized and you’ll likely have to learn the material on your own. The most common methods of teaching the material is through recorded videos/audio of the professor’s lectures. Others may post text-only lectures or PowerPoints online for you to read and observe. Depending on the course, there may be weekly homework assignments, discussion boards, online reports, exams, and of course, finals. Most likely, the important components of the course (lab, midterms, and finals) will be held on-campus at a scheduled time and date assigned by the professor.

CREDITS FROM THE COMMUNITY COLLEGE
BY: KENNETH CHANG

Taking classes at a local community college can be a lot different than taking classes at UC Davis. There are a number of key differences that can make your experience more enjoyable but also more stressful. During the Summer of 2013, I took two classes at my local community college, Ohlone College: Linear Algebra, and General Psychology.

The first and most glaring difference is class sizes. At UC Davis, major math and science classes have sizes numbering in the hundreds, with individual section discussions led by a TA rather than the professor. At a smaller regional community college however, class sizes are a lot smaller. For both my Linear Algebra and General Psychology class, the class size was capped off at about 40, or about the size of a discussion section at UC Davis. This means that I got more personal interaction with the professor, and with my classmates. A small class size is highly beneficial since the professor can get to
know his or her class. As a result, I could also get help much more easily, as the professor was not busy with research and other duties.

Another difference about summer classes is how long they last. Here at UC Davis, we are used to the quarter system, where a class will take about 3 months, or 10 weeks to go through the material. During summer session however, classes only last for 6 weeks. This shortened time means the pace of teaching is a lot quicker and can quickly overwhelm someone if they are not careful. However, as long as you keep on top of your work, you should be fine, like I was.

In addition to the rushed pace of the class, there was another major difference in class schedules: There is no finals week. Instead of a dedicated week where all classes take their finals, during summer session, the final is simply taken on the last day of class. This means that not only do you now have the weekend to study, but now all of your finals are on the same day. This may seem like a nightmare at first. After all, at Davis, all your finals on the same day means 3-5 tests on a lot of material, 10 weeks’ worth. However, closer examination shows that it really isn’t that bad. First, you are restricted from taking that many classes during summer precisely for this reason. Most people won’t go beyond 1 or 2 classes, so instead of 4 subjects you have to cram for, you only have to divide your attention between 1 or 2. In addition, the amount of material you actually do learn is also slightly shortened, a side effect of having to cram in 10 weeks of material into 6. So in reality, I didn’t have to study as much material as I thought, and didn’t have to divide my attention as much either.

Finally, there were some differences that were unique to the fact that I was taking a college level class at a place other than UC Davis. The first was that the location was very close to home, and as such, I was much more familiar with the surrounding area, and more comfortable in general, as I was studying in a place I was already familiar with. Also, the grading system was slightly different, as there were no plusses or minuses in grading, only straight grades. Finally, the lack of discussion sections felt different, and I had gotten used to them to discuss material. 

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Thank you for reading! We’ll see you in the Fall 2013 Edition!