

BioMedical Electronics Spring 2017 Student SLO Report

Spring 2017 - Bio-Medical Electronics

July 26th 2017, 9:26 pm MDT



Q3 - What did you like about this program?

The hands on experience

I liked that way we were able to work on and maintenance equipment.

It was close to my hometown and the college was cheap. The internship and clinical was nice.

What I like most about this program was the onsite clinical and the internship class. I believe these classes helped me to fully understand what the biomedical world would entail.

Getting a bunch of hands-on experience with tons of different equipment.

I liked that I know I would be able to get a job right before/after graduation.

Getting to work on different equipment, and getting to work as part of a team

I liked becoming familiar with concepts I've never learned before (electronics, soldering, and basic hands-on tools). I also liked going into the program knowing that I had chosen a career with a lot of opportunities, so job security is another thing I liked.

Doing the hands on in clinicals and internship.

Nearly everything, the thing I like the most was being able to work on and test units at Gunderson for training.

You can work in medical field and it is a good paying job.

I liked working with tools and the challenge of troubleshooting equipment.

The internship.

Q4 - What would you change about this program?

The amount of teachers would be helpful, but to my understanding that has already been addressed with the new course format.

I would change it so we got to do more hands on things.

Sometimes you got lost in so many specific details and specifications that you lost what actually matters working in the field. Drive home the basic concepts before drowning in details and specifications. Narrow it down to what we need to know and focus on that.

I would change the structure of the blackboard site. The blackboard site was very poor and resulted in a lot of miscommunication.

More organization

Just the structure of the programs. It has changed since.

I would of liked a larger variety of devices to work on over at the Gunderson hospital. Although I realize that that's not something the school cannot control

In our year of the program, some things felt very rushed through. If the more advanced concepts (such as Solid State) could be broken down into smaller chunks it would help immensely. Networking is another part of the program I think should gain more focus, since IT is being further integrated with the biomedical field.

I would add more time in for hands on stuff instead of learning so much about real in-depth things like in A&P

nothing

flexibility of classes for busy people with jobs and kids. like some classes (fab tech 1 &2) were only provided in fall only if it was the option in summer that will help.

I would rather have more hands-on explanations versus lecture.

More pertinent classes such as networking, and more hands on in the classroom with equipment. No speech or Tech reporting. Tech reporting is a repeat of written communications. Moe flexibility in the scheduling with the core classes.

Q6 - As a result of this program: I have learned effective communication skills.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	7.69%	1
3	Neither Agree nor Disagree	15.38%	2
4	Agree	46.15%	6
5	Strongly Agree	30.77%	4
	Total	100%	13

Q7 - Provide any comments you have on effective communication skills you learned.

We were able to interact with people at the BAW and at our internship to get a feel for the field.

Document equipment on TMS

I have learned to document my progress in a brief but precise manner in the TMS documentation

It has taught me how important clear communication between hospital departments is.

Communicating with the staff at my clinical site

Always follow up!

My previous work experience provided me with plenty of skill in this area.

Q8 - As a result of this program:

Q8_1 - I am able to apply mathematical concepts.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	15.38%	2
4	Agree	61.54%	8
5	Strongly Agree	23.08%	3
	Total	100%	13

Q9 - Provide any comments you have on mathematical concepts you learned.

Provide any comments you have on mathematical concepts you learned.

You have to apply math by determining the tolerances for different pressures and values of equipment.

I thought I would have to use math more often.

I've never really had a problem figuring out the math formulas, although I must admit that there were times where I felt completely lost when trying to apply them

Pythagorean theorem: $a^2 + b^2 = c^2$

$1+1=3$

I found the math teachers I had, XXXXX XXXXX I and XXXXX XXXXX to be very good instructors.

Q10 - As a result of this program:

Q10_1 - I learned how to transfer social and natural science theories into practica...

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	7.69%	1
3	Neither Agree nor Disagree	30.77%	4
4	Agree	53.85%	7
5	Strongly Agree	7.69%	1
	Total	100%	13

Q11 - Provide any comments you have on transferring social and natural science theories into practical applications.

Provide any comments you have on transferring social and natural science th...

We got to record our results into a data base.

Bio-Med Science Applications however was a extremely well taught course.

Learned how to troubleshoot on various equipments

I have learned that I second guessed myself way too much, and that constantly led to error. But now I have learned to trust my gut feelings more, yet still apply common sense and get a second opinion if I don't understand something.

Learning the right medical concepts for talking with hospital staff

use social and science everyday.

Q12 - As a result of this program:

Q12_1 - I learned critical thinking skills.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	7.69%	1
3	Neither Agree nor Disagree	7.69%	1
4	Agree	61.54%	8
5	Strongly Agree	23.08%	3
	Total	100%	13

Q13 - Provide any comments you have on critical thinking skills you learned.

Provide any comments you have on critical thinking skills you learned.

We had to trouble shoot equipment and find the problem.

The troubleshooting skills I've gained require a lot of critical thinking.

Learned how to troubleshoot on various equipments

Have a work order and it says "broken" and think about the possibilities that could be wrong

Troubleshooting

My troubleshooting ability increased with my critical thinking skills.

Q14 - As a result of this program:

Q14_1 - I have learned to use technology effectively.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	15.38%	2
4	Agree	46.15%	6
5	Strongly Agree	38.46%	5
	Total	100%	13

Q15 - Provide any comments you have on what you learned about using technology effectively.

Provide any comments you have on what you learned about using technology ef...

In the biomed field it is important to know a bit about technology because almost everything is online now.

My in class experience did not help with this however my internship it was swayed my decision to neutral.

It would have been nice to have some more modern pieces of technology.

Document equipment on TMS. Ability to use test equipment.

Learned how to use and how to fix computers and other hospital equipment

As a biomed you live with technology everyday

I learned how to use the computer to accomplish more tasks and how to get it to do exactly what I want.

Q16 - As a result of this program:

Q16_1 - I have learned to value myself and work ethically with others in a diverse...

#	Answer	%	Count
1	Strongly Disagree	7.69%	1
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	23.08%	3
4	Agree	30.77%	4
5	Strongly Agree	38.46%	5
	Total	100%	13

Q17 - Provide any comments you have on what you learned about valuing yourself and working ethically with others in a diverse population.

Provide any comments you have on what you learned about valuing yourself an...

In the workplace you are going to have to work with all kinds of different people and they are not different than anyone else.

Was able to work as a team player during my internship and clinical hours

Knowing how to speak to certain people

I work in Hospital and that is one place where you can see a lot of diversity an my class has helped me to deal with diversity.

Q18 - As a result of this program:

Q18_1 - I am able to make decisions that incorporate the importance of sustainabili...

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	23.08%	3
4	Agree	53.85%	7
5	Strongly Agree	23.08%	3
	Total	100%	13

Q19 - Provide any comments you have on what you learned about incorporating the importance of sustainability in decisions you make.

Provide any comments you have on what you learned about incorporating the i...

We recycled batteries at my internship site.

Various methods to reduce waste and conserve energy.

Learned the importance of OSHA and HIPAA

Knowing the easiest and quickest way to do something to be more proficient

I learned the importance of properly disposing of batteries and e-waste instead of just throwing them in the garbage bin.

Q21 - As a result of this program, I learned to:

Q21_1 - demonstrate clinical workplace ethics.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	0.00%	0
4	Agree	53.85%	7
5	Strongly Agree	46.15%	6
	Total	100%	13

Q22 - Provide any comments you have about learning this program outcome.

Provide any comments you have about learning this program outcome.

At my internship we had to be professional and treat everyone with respect.

Learned the importance of HIPAA and followed clinical guidelines

No swearing in the hallways

respect all, being punctual, look professional, team

I demonstrated the oath of hippocrates through my actions as well as adhering to HIPAA

HIPAA regulations were very interesting.

Q23 - As a result of this program, I learned to:

Q23_1 - utilize knowledge of anatomy, physiology, and medical terminology.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	0.00%	0
4	Agree	69.23%	9
5	Strongly Agree	30.77%	4
	Total	100%	13

Q24 - Provide any comments you have about learning this program outcome.

Provide any comments you have about learning this program outcome.

It is important because when talking to doctors and nursing they use words that if you did not study medical terminology you would not know.

I think there may have been too much emphasis put on body systems that a biomed will never need to know about.

Using correct terminology on journal entries and powerpoints on internship days

Took two semester of A&P, so learned a lot

when I have to communicate with nurse, radiologist, respiratory therapist, PT,OT I can understand their jargons.

I used some medical terminology while interning at my host site.

Q25 - As a result of this program, I learned to:

Q25_1 - demonstrate understanding of the machine/physiology interface.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	7.69%	1
4	Agree	61.54%	8
5	Strongly Agree	30.77%	4
	Total	100%	13

Q26 - Provide any comments you have about learning this program outcome.

Provide any comments you have about learning this program outcome.

As a biomed you do not need to know everything about anatomy but it definitely helps when you troubleshoot equipment.

Learned how to troubleshoot on various equipments

Internship and clinicals learned all of that

during my internship I had opportunity to work on several equipment independently which helps understand machine. some of them were new or same machine is called different names in different department.

I demonstrated my knowledge of physiologic interfaces to troubleshoot equipment while at my internship.

Q27 - As a result of this program, I learned to:

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	7.69%	1
4	Agree	53.85%	7
5	Strongly Agree	38.46%	5
	Total	100%	13

Q28 - Provide any comments you have about learning this program outcome.

Provide any comments you have about learning this program outcome.

The ability to work together on a piece of equipment.

More test equipment would be nice so it's not four people all using the same unit.

Worked with classmates on troubleshooting and PM'ing various equipment

Helped the other guys a bunch of times with fixing certain equipment at clinicals

Team work is highly valued

I helped others who were struggling while at clinicals at Gundersen.

Q29 - As a result of this program, I learned to:

Q29_1 - maintain bio-medical equipment using test equipment and hand tools.

#	Answer	%	Count
1	Strongly Disagree	7.69%	1
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	0.00%	0
4	Agree	61.54%	8
5	Strongly Agree	30.77%	4
	Total	100%	13

Q30 - Provide any comments you have about learning this program outcome.

Provide any comments you have about learning this program outcome.

We learned how to fix equipment and be able to do electrical safety tests.

Used the proper test equipment on an equipment and used the right tools for the right job

During my clinical and internship I had lots of opportunity to use all kinds of tools and simulators.

During my time at both my internship and clinical work, I used many different hand tools as well as test equipment to ensure the proper functionality and safety of medical equipment.

I could have used a lot more hands on experience.

Q31 - As a result of this program, I learned to:

Q31_1 - demonstrate basic electronics skills.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	15.38%	2
4	Agree	53.85%	7
5	Strongly Agree	30.77%	4
	Total	100%	13

Q32 - Provide any comments you have about learning this program outcome.

Provide any comments you have about learning this program outcome.

The use of a multi meter to measure the resistance between two points.

Solder some equipment at internship site

Learned a lot in solid state and biomedical electronics classes

There should be more in depth usage of voltmeters, ammeters and such equipment.

Q33 - As a result of this program, I learned to:

Q33_1 - demonstrate a competency of computers and networks used with bio-medical eq...

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	7.69%	1
3	Neither Agree nor Disagree	23.08%	3
4	Agree	61.54%	8
5	Strongly Agree	7.69%	1
	Total	100%	13

Q34 - Provide any comments you have about learning this program outcome.

Provide any comments you have about learning this program outcome.

Everything is becoming networked in the hospital setting it is important to know some networking.

Having more experience working with networks directly through medical equipment would have been nice.

learned about PACS and DICOM

2 semesters of med nets

Q35 - As a result of this program, I learned to:

Q35_1 - explain aspects of imaging systems.

#	Answer	%	Count
1	Strongly Disagree	0.00%	0
2	Disagree	0.00%	0
3	Neither Agree nor Disagree	7.69%	1
4	Agree	69.23%	9
5	Strongly Agree	23.08%	3
	Total	100%	13

Q36 - Provide any comments you have about learning this program outcome.

Provide any comments you have about learning this program outcome.

We know how to distinguish the modalities apart and how they work.

PM'ing ultrasound and xray at internship site

I still have trouble explaining everything about imaging equipment, but I can say that I have learned enough to differentiate one from the other

Took a semester of imaging

clinical course became more clear after you get to work on real X-ray machine and linear accelerator and ultrasound machine.

I have not had the opportunity to work with much imaging equipment as of yet. But if I were asked, I would be able to explain the basic concepts.

Q37 - CONCLUSION Please use this space to share any other feedback, comments, or suggestions about your experience at Western Technical College.

CONCLUSION Please use this space to share any other feedback, comments, or...

I enjoyed my experience and I am happy with the end result.

Western as a school and all of the general education classes I took were great. The program overall was successful at it's job but it could be better. What I said about narrowing down the information to what you need to know instead of getting lost in copious amounts of information. That information is good and things we should know but some of it is less than productive because it is taking away from the things that are truly important.

The program could use a much more diverse amount of teachers. The program right now needs a substantial amount of in class altering but the on-the-job training is perfect as is.

Thank you for a great education which has opened so many doors for me!

I just enjoyed going here, and I can say that I'm actually going to miss this place.

I really appreciate going into this program and coming out with skills that I never knew before. These concepts have expanded into my own personal life and I will benefit from this for the rest of my life. With that said, no college program is perfect. Some of the harder aspects of the program (like electronics) I believe need more attention and more time dedicated to them.

I thought it was a great program with great opportunity in the job market

This is a GREAT program!

I am glad i have a lot of previous work experience in a semi related field as i do not think this curriculum provides a young student with the necessary tools to be as prepared as they should be. This field is more about forming relationships and being able to be a good teammate than anatomy or tech reporting skills. It should be more hands on with tools and computer systems and less anatomy. Solid state should have been abolished 10 years ago from what i have gathered from techs in the field. This institution seems to be very slow to adapt to feedback and i believe that is hurting the program and all who enter it. I do not feel i got my moneys worth and am disappointed that i wasn't taught more relevant subject matter.