

Western Student Learning Results (Program Outcomes) for 2011

Source: Student

of Grads: 11

Program: Bio-Medical Electronics

of Responses: 12

Outcome	Yes	No	Unk	NA	Result	Feedback
What did you like about this program?	12 100.00%	0	0	0		
					Yes	Passionate, intelligent, helpful instructors. Good experiences in the field.
					Yes	All of the hands on learning at the hospital. It was really backed up then with explanations of lecture from Fred and Lilly. The pace of the semesters were hard paced but I understand why they need to be that way, and looking back it was a good that it was that way to keep us motivated, and sometimes that is how it will be in the field.
					Yes	I think the first year I learned alot. It was quite hard with a ton of homework and late nights, but it all worked out. After Fred retired, I didn't learn much in the classes when he wasn't there for the second year of my degree. I could have sat at home for alot of it. Overall I think I gained alot of knowledge and as an outcome, hopefully I can get a job.
					Yes	I liked that the program tried to cover all of the information that may be needed in the field. It was difficult at first to understand what a broad field biomed is, but getting a little experience in it all was a great eye opener.
					Yes	Hands on work in labs, knowledgeable faculty, chance to interact with biomed on the job through clinicals and internships, Curriculum related to the job, involvement in clubs and state-wide organization, good support classes.
					Yes	Oh, a bunch of stuff. I learned many things about this field that will help me in my future career.
					Yes	I liked working in the hospitals and getting the hands on training. I need to see the equipment in order to make it work.
					Yes	I liked the ability to work in the field.
					Yes	I feel more than prepared
					Yes	I liked the hands on learning and the main topics of the program. This is a great program for someone of my interests.
					Yes	The friendly teachers and all the information I was provided. I also liked having access to Gunderson and the Health Science Center to work on equipment.
					Yes	what i liked about this program is, the wealth of information that i learned and how involved the instructors were. They dedicated their time and knowledge to make sure we succeeded
What would you change about this program?	12 100.00%	0	0	0		
					Yes	get equipment that works so the student can see how it works in the first place, then make them find things that you can make the machine not work.
					Yes	Newer equipment in the classroom
					Yes	i think the equipment used in lab should be updated

Outcome	Yes	No	Unk	NA	Result	Feedback
					Yes	Include more basic electronics courses. For the students that come in with no electronics history or knowledge it is a lot to learn all at once, and having more information would be helpful.
					Yes	I would not change a thing about the program. I obtained a good solid knowledge in the basics of the field, and was able to explore other more specific areas in more detail.
					Yes	nothing
					Yes	I think that there should be more hands on stuff.
					Yes	I would change the clinicals course. I feel like I did not learn much from Jon H. in the clinicals course.
					Yes	I felt I should have learned more my second year from the three classes I took from the new professor. He appeared unprepared and that he was not putting forth much effort into teaching the classes.
					Yes	I would continue to let the students do a summer internship for the first year. The whole point of college is to get a job. So why make all the students do their internship in the fourth semester, when they could have done it last summer and possibly have a job in the fourth semester. It doesn't make sense.
					Yes	I would maybe bring in a little bit more of the electronics classes just for the troubleshooting aspect of particular equipment that could maybe go down in a hospital system.
Use effective communication skills.	12	100.00%	0	0	0	
					Yes	We had to learn right away how to communicate with vendors and manufacturers.
					Yes	by using equipment that is in good working order you can then show how things work in real life.
					Yes	Yes, I think the program had good communication skills.
					Yes	yes
					Yes	Yes, I am able to communicate effectively. This is something that I feel I was able to do before starting the program, and it is something that the program helped me improve on as well.
Apply mathematical concepts.	12	100.00%	0	0	0	
					Yes	Tech math was difficult. But all of the math equations learned for electronics were very helpful, even if difficult at the time of learning.
					Yes	The technical math course was quite hard for me, but I think it got me ready for the math related parts of the program.
					Yes	Math has always been a strong suit of mine. The approach to math was an interesting one. I like how there was more application of learned concepts than just learning formulas.
					Yes	I am so glad the way my math teacher helped me through the course, they showed me that they cared.
					Yes	We did not cover Logarithms in Tech Math 1A and 1B but I think we should as we need it to understand some electrical and biomed concepts such as Decibels. Our fab tech II project required us to know logs, which I did not know as it was not covered in Tech Math.
					Yes	Many of the mathematical concepts learned in the math courses are never used again in the biomedical field.
Transfer social and natural science theories into practical applications.	11	91.67%	1	8.33%	0	0

Outcome	Yes	No	Unk	NA	Result	Feedback
					Yes	The social studies classes; sociology, and psychology were actually not very necessary to me. Either you know how to act in social situations or you don't. These classes didn't teach me anything new.
					Yes	Yes. Everything I learned is very useful.
					Yes	I'm not quite sure how to answer this one.
					Yes	sure, whatever that means.
					Yes	Yes the clinicals and internship requirements provide these application's experiences.
Demonstrate ability to think critically.	12 100.00%	0	0	0		
					Yes	Specifically for troubleshooting.
					Yes	Yes, I think I got more critical thinking part from my internships though. Also in the troubleshooting class, we didn't do any troubleshooting, so there was no critical thinking or learning anything there.
					Yes	I can see the answer in my head better than trying to explain things.
					Yes	Critical thinking is key. If you are able to take your time and figure out a solution to a problem, you have answered all of the questions already. This program helped me build on the skills I already had.
					Yes	Could be a little bit more enhanced in the troubleshooting course. But it is worked on everyday at the hospital when working on equipment.
					Yes	Everything learned and taught in this program is very useful when it comes to troubleshooting specific problems.
Demonstrate ability to value self and work ethically with others in a diverse population.	12 100.00%	0	0	0		
					Yes	Yes, I already knew how to work with others and I know I have a good work ethic.
					Yes	The classes in the program helped build on this ability by having some group assignments, and this was a great way to learn how to work with different people.
					Yes	This section is covered very well in this program.
					Yes	Working on patient equipment everyday and must pass quality tests and safety of patients always comes first. It is one of the first things we learned on the first days of school.
					Yes	I usually get along with everybody, but it was tough to be going back to school.
Use technology effectively.	12 100.00%	0	0	0		
					Yes	Absolutly
					Yes	The computer classes that were linked with this program were great. I learned a lot about what I thought I already knew about.
					Yes	Absolutly
					Yes	That was tough for me because some of this tech was new to me.
					Yes	I learned alot about computers and test equipment.
Make decisions that incorporate the importance of sustainability	10 83.33%	2 16.67%	0	0		
					Yes	I have always overcome the tasks that have been put in front of me.
					Yes	Especially durring internship opportunities.
					Yes	I learned that it is important to conserve where possible.

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					Yes	Sure
					No	Sustainability was not mentioned much.
Demonstrate clinical workplace ethics	12 100.00%	0	0	0		
					Yes	yeah, I got that figured out
					Yes	Definatly through clinicals and internship training.
					Yes	I like the work inviroment that i was in. It was tough not to make jokes all the time though.
					Yes	This is something that I was able to learn very well. First in our Codes and Standards class, and then continuing in our Clinical and Internship classes as well.
					Yes	I feel that this portion is lacking with in the courses in this program.
					Yes	By having the chance to work at the local hospital this was instilled and being able to work at the HSC. It was also instilled properul professional workplace attire.
Utilize knowledge of anatomy, physiology, and medical terminology.	12 100.00%	0	0	0		
					Yes	Daily basis terms were learned and used and built upon.
					Yes	I learned alot about the human body and tried to share that with others.
					Yes	Learning the basics to these has been very important. To know what you are working with when someone else uses terminology helps you to understand what kind of situation you are getting into.
					Yes	Anatomy I learned some but it is quite hard to remember it all. Medical terminology I learned some but there is a ton I don't know.
					Yes	All the course related to this are very effective. I wouldn't change anything about these courses.
Demonstrate understanding of the machine/physiology interface.	12 100.00%	0	0	0		
					Yes	When I got to work in the hospitals, thats when it all started to come together.
					Yes	The labs that went along physiological processes were a great hands on experience to se in the interface at work.
					Yes	Yes.
					Yes	I can break down many pieces of equipment now and understand how the components work together, and how they work together.
					Yes	yep
Instruct others in the operation of Biomedical equipment.	12 100.00%	0	0	0		
					Yes	yah I can do that
					Yes	I have been able to talk with other students about equipment and explain how they work and help with homework, and teach how to test different pieces of equipment.
					Yes	I loved the fact that I could show others how to work on equipment because of all the equipment that I haver worked on over the years.
					Yes	It was good in Clinicals II lecture to have the opportunity to perform an inservice on equipment. You was a good example of what the experience of instructing someone else is like.

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					Yes	Yes.
					Yes	Very good opportunity to learn of the equipment available.
Maintain biomedical equipment using test equipment and hand tools.	12 100.00%	0	0	0		
					Yes	Awesomeness.
					Yes	The greatest learning area was the HSC and learning hands on, and then again at Gundersen.
					Yes	Health Science Center was a very good opportunity for this.
					Yes	yep I learned quite a bit in my internships
					Yes	Clinicals classes were a great introduction to learning how to maintain equipment, and gives a bit of an insight to the process of doing so.
					Yes	Thats the one thing that I shine at is working with tools.
Demonstrate basic electronics skills.	12 100.00%	0	0	0		
					Yes	yep
					Yes	AC DC fundamentals, along with circuits classes give me all of the electronics skills that I have. Before these classes I didn't know anything about electronics
					Yes	I would change nothing about this.
					Yes	Very good classes of what we had but could use maybe one or more additional classes.
					Yes	Coming in with no history in electronics I feel that I have accomplished this outcome. Learning everything in AC/DC and then was able to carry it over to other classes and understand how it all relates.
					Yes	I'm more electrical than electronical.
Demonstrate an understanding of computers and networks used with biomedical equipment.	12 100.00%	0	0	0		
					Yes	Med Nets and Cisco I were great in learning a bit more than the basics to computing
					Yes	yah but could have learned more or spent more time on it. It gets quite confusing.
					Yes	Our networking classes were very helpful.
					Yes	During the class it felt confused many times, but based on communicating with staff in the field, I have discovered that the classes were very good because I can communicate about networks, and how telemetry systems can work.
					Yes	Lilly does a great job!
					Yes	It alsomost kicked my butt, but I need to use the computer more than I have in my life.
Explain aspects of imaging systems.	12 100.00%	0	0	0		
					Yes	Lilly does a great job of this too!
					Yes	The imaging class was great. We were able to learn the basics of many different type of systems.
					Yes	yah, learned the basics pretty good
					Yes	while working at Marshfield, I could understand what they were talking about and was not afraid to ask questions.
					Yes	I have been able to explain these systems to friends.

<i>Outcome</i>	<i>Yes</i>	<i>No</i>	<i>Unk</i>	<i>NA</i>	<i>Result</i>	<i>Feedback</i>
<i>Aggregate Assessment of Achievement</i>	201 98.53%	3 1.47%	0	0		