

Transcript: Bridge Show 1 - B303 September 12, 2011

Up next on ATETV, from the development of new lifesaving drugs to efficient crop production biotechnology is impacting our daily lives in many different ways.

Biotechnology is commonly defined as the manipulation of living things to produce useful products. A biotech education offers a broad range of opportunities, whether you're looking for an entry level position or if you have a science degree and are looking to expand your skills and develop expertise in a lab environment.

We've been working with our actual cells from mammalian cell culture and we started the semester off with a transient...

Biotechnology is the interface between technology and biology.

So what we're measuring here when we...

It's using biological systems and deriving tools from those systems to explore or create or generate biologically relevant products.

I'd never had any biotech courses other than just biology in high school.

These courses are tailored for students that are interested in retooling their skill set for the biotechnology workplace; talking about people who can multitask, people who have initiative and drive.

Well I'm going part-time and I have four kids at home, so...

We do try to model it after a workplace where we anticipate that the students will be coming in on time and they will be filling the time that they have here with as many of the techniques as we can afford to show them.

Hey now, you guys ready to load this?

Yes we are.

Ok, so your gel's warm to the touch and it's ready to go.

This is a fifteen unit course, it is a sixteen week duration, and we actually go through five different courses in here; laboratory math for biotechnology, basic lab skills, subculturing, molecular biology, protein isolation, and we actually put a business class in there as well.

You guys are making a product here for your biotech companies that you guys are forming.

We integrate some of the concepts of business management; building the company, manufacturing, quality check, and marketing.

And you can use that and see if you have DNA and also quantify the amount DNA that you have.

I graduated with my bachelor's and it was really difficult to find a job. And a lot of the areas where I was looking in, which was lab research, required experience and a specific set of skills. And while I may have done some of those, I didn't feel confident and that's why I came here; I wanted to gain more confidence in my lab skills.

We do spend a lot of time focusing in on the lab skills and so hands-on. But having said that, we do see the need for introducing a lot of the material in terms of lectures because in order to have a really solid foundation in biotechnology, we feel that you have to understand some of the concepts, of course, before you apply them with your hands.

It's been focused and you've got to really work at it, but the rewards are definitely there.

Biotechnology has from what I noticed, a lot of job opportunities. You don't necessarily see a lot of jobs available for somebody with just a biology degree in the area as opposed to biotechnology.

The kind of person that we see succeed in biotechnology; someone who is interested in the world around them, either improving or making the world a better place. And, of course, being conscientious about your environment and about society, and thinking about the ethical implications also is a very big factor because a good scientist is always going to be thinking about the impact of the work that they do.

This program gives you skills in so many areas. You could work in a Pharmaceutical industry, you could work in the food industry, you could work in textiles, you could work anywhere where that there is going to be quality assurance or testing, laboratory work or development.

I realize that the whole biomedical field is going to be...it's a great industry to be in and having these very concrete, very definite skills that I can bring to the table. I wanted to be on the other side of the equation; I wanted to be the one with the skills that people would call me about. They'd find my resume and call me.

We can see the impact of biotechnology in our daily lives; everything that we do from the things that we consume to the clothing that we wear. Everything in the world that we live in is touched by some aspect of biotechnology and it's just a matter



of really probing and trying to understand how that facet of biotechnology impacts our lives.

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Thanks for watching.