

INDIE MAJOR PODCAST

4/1/24 Garrett Sasseville

Individualized Major: Integrative Exercise Physiology and Nutrition

Ken:

This is Indie Major, a show devoted to the wide-ranging stories and visions of individualized majors at the University of Connecticut. I'm your host, Ken Cormier.

I'm here with Garrett Sasseville. Hi, Garrett.

Garrett:

Hi, how are you?

Ken:

Good, how are you?

Garrett:

Good

Ken:

So we're here to talk about your individualized major. Why don't you let us know what it is and what it's all about?

Garrett:

The name of my major is Integrative Exercise Physiology and Nutrition. I kind of just took key aspects from both the exercise science and the nutrition majors and combined them. So along with a few other courses from other departments, I designed a major that I think provides a very well rounded and unique knowledge base for anybody going into the field of exercise science or nutrition, especially in athletic or clinical settings.

Ken:

So Integrative Exercise Physiology and Nutrition?

Garrett:

Yep.

Ken:

I'm getting that right? So the integrative part, what does that mean? Is that integrating exercise and nutrition?

Garrett:

Yeah, so in my head, exercise and nutrition have always kind of gone hand in hand as they do. So I mean to reap all the benefits of good exercise, you need proper nutrition and along with proper nutrition, you should be maintaining a good exercise regimen. So having those two things working together, I think is giving me a really good knowledge base in terms of what I might use down the road, working with people, coaching them, I can kind of hit it from all angles instead of only having a strong knowledge base. And exercise being like, oh yeah, but you have to go talk to this person about your

nutrition. It's kind of an all in one understanding of how they work together.

Ken:

So you seem to have a pretty clear idea of what you want to do after you graduate?

Garrett:

Yeah, I actually want to go into physical therapy, but my interest lies in a lot of differ, a lot of different places. I did my first internship actually at a personal training gym where we were really taking a lot of exercise, a lot of nutrition, and combining them to give people a full coaching experience to maximize the results that they were seeing. So we're not just hitting it from one side, we're showing them what to do in the gym, but then also showing them what they can do with their food to help them maximize those benefits.

Ken:

Okay. So what kind of classes are you taking or what departments are you drawing from for this major?

Garrett:

Most of my classes are coming from the Kinesiology and the nutrition departments. But I also took a couple of extra classes from the PNB departments, such as cardio-respiratory physiology. I took an Allied Health Research Methods course, which is coming a lot in handy now as I do my exercise science capstone. So classes like that I think are the unique ones that wouldn't have been included had I just majored in exercise science or nutrition. It's adding to my

understanding of what I'm learning from those majors and giving it a different perspective.

Ken:

So, PNB is physiology and neurobiology?

Garrett:

Correct.

Ken:

And when you take a class over there, are you taking classes that are more in the physiology side, or do you also study neurobiology when you're there?

Garrett:

So, initially, I had only taken Human Anatomy 1.2 which is in the PNB department. But cardio-respiratory physiology was probably the only other class from that department that I took. And I saw that and I'm like, okay, I am learning about the cardio respiratory system like from an exercise science standpoint. A little bit from the nutrition standpoint. And now I'm taking it from a physiology, a much more molecular level, so I have a better understanding of how those bigger ideas work.

Ken:

And then there's also so kinesiology is an important department for you course. So kinesiology is where exercise science happens, right?

Garrett:

Yeah.

Ken:

And was there like a standout kinesiology course that you can remember or, you know, what do you study over there?

Garrett:

Definitely. I know bio mechanics was the first course in exercise science that really, really solidified my desire to be in the major. I loved it. I had no problem going to that morning class because I wanted to be there. And it really helped me solidify what I wanted to do in terms of going to physical therapy school after my undergrad. Just the mechanical aspect is one of my biggest interests, so that course definitely stood out.

Ken:

So do Kinesiology classrooms have equipment in them and stuff?

Garrett:

The labs and Gampel Pavilion have stuff like that. But the classrooms is all just lecture based. Which is nice taking that and going into the labs. A lot of the KINS classes will do in-class labs, which I think is pretty unique. The in class labs aren't something I've seen done in a lot of other departments. So getting the opportunity to take a class that's mostly lecture based and

then give it application once in a while without having to do a whole separate lab component is pretty cool.

Ken:

And then nutritional sciences, have you taken a bunch of those classes?

Garrett:

I have, yep.

Ken:

And what's a stand out from that side of things?

Garrett:

The nutrition course called Nutrition for Exercise and Sport was the course that actually made me want to do my minor, which is called Nutrition for Exercise and Sport. I'm taking that nutrition background, that knowledge that I have, and really applying it to the whole other end of my major which is the exercise science aspect. And it's giving it a much more tailored view. If I was ever go into nutrition with athletes and things like that, I'd have a much better understanding than I would even with just the two exercise science and nutrition majors combined.

Ken:

So are those, would you consider those to be like really science heavy courses?

Garrett:

Definitely. Yep.

Ken:

So you're learning about what the way the body interacts with food and then how that results in, what, certain outcomes that relate to exercise?

Garrett:

Definitely, it definitely starts with those prerequisite courses in anatomy and physiology. And you're taking a lot of the concepts you learn in there, especially things surrounding metabolism, the aerobic and anaerobic systems that you're using for energy and how everything you're eating, how it breaks down, and the molecular level of how all that works.

Ken:

All right. So you're thinking physical therapy is the career you're headed toward?

Garrett:

Yeah.

Ken:

And you mentioned doing more school after this is that right?

Garrett:

Yeah. So physical therapy school is a three year doctoral program, so I intend on doing that. But I'd love the opportunity after that to do continuing education and specialize in different aspects. I'm really interested in orthopedics, but I'm also interested in cardiovascular health and neurology as well, which are three different parts of physical therapy you can specialize in.

Ken:

Okay. And do you know where you're going to be doing grad school?

Garrett:

My top choice is in South Carolina right now, but I'm definitely going to apply to the UConn program and then there's a few other programs in different parts of the country I was looking at as well, but I definitely would love to be in South Carolina. They have a really nice program down there that's also combined with a Master's in Business Administration that I think could be very useful down the road.

Ken:

Very good. And so do you have an idea of where you want to be geographically when you actually start your career or is that just kind of up to whatever's available?

Garrett:

I mean, I think a lot of the opportunities that really grab my attention are up here. Just given that we're fortunate enough to be in a part of the country where we have a lot of this groundbreaking research

And just like really world class medicine that's accelerating really, really fast, that's not something that you're going to get in a lot of other places. So I think a lot of the opportunities that would excite me the most would definitely be up here at hospitals. Like, I mean, they have the new Bone and Joint Institute in Hartford, which I'm actually trying to get into observation right now. They have, I mean, Mass General Hospital, Boston Children's. Those are all hospitals I would love the opportunity to work at, depending on what I end up really trying to do.

Ken:

Yeah, of course. Because physical therapy, you can specialize, right? So there are physical therapists associated with hospitals, for example, who specialize in pediatrics or even in oncology or like all sorts of ways in which you can use physical therapy in those kinds of settings.

Garrett:

Right, Definitely. Yep. I'm interested in inpatient. So working in a hospital with patients that either are just just beginning to recover from things like just just had accidents. Regardless of what it may be, there's a whole variety of things you could be doing—recovery with patients that are recovering from a musculoskeletal injury. You could be helping patients recover from more of a neurology based injury, like a stroke, like an accident that you're kind of maybe helping them learn how to walk. You're working with occupational therapists and all sorts of things. Cardiovascular is a big one as well. Getting people's cardiovascular system strong again after something like heart surgery, a heart attack, stuff like that.

Ken:

And it sounds like in some of these settings, you might also be involved in research, not just the actual sort of clinical work with patients.

Garrett:

Definitely, yeah. Research wasn't even something that I ever expected myself to be interested in. But especially this year, my senior year, I mean, it was introduced to me last semester the most, especially as a lot of my friends in other departments started doing research, I was more apt to look into it. And now that I'm doing my capstone project, I'm working with a professor one on one for that. Research has become a huge interest of mine, especially seeing how new a lot of the stuff in exercise physiology is and how, how much we're learning from it right now. And even just since 2020 started, how much new research there is. And having the opportunity to be a part of that is something that I think could not only accelerate my career, but there's the potential to help a lot of people and change the way that we do a lot of physical therapy and like orthopedic medicine like that.

Ken:

So what is it that you're working on in your project?

Garrett:

My Capstone project right now is based on return to play guidelines following injuries. I'm looking at how we do things like hop testing for patients. If somebody had an ACL surgery, gauging their recovery, seeing how far they might hop for like lateral hops for

instance. My project is going into, well, that distance itself isn't enough. We need to look at how these people are moving. And even though their distance may be good, if they're not moving right, we're going to change how we're doing their therapy. And we're going to change when we're letting them go back to play. Because if they're not moving right, they're way more apt to be injured again, and a lot of this is a lot of the bio mechanical aspect is research that hasn't been done yet. A lot of people aren't looking at that bio mechanical aspect yet. They're saying, okay, you seem to be performing better, we're going to throw you back in. But if someone's not moving right and you're not picking up on that, chances are they're going to get hurt again. I'm really looking at how reliable a lot of these tests are and how we can improve them and make them more sensitive and improving return to play protocols.

Ken:

So does this mean that you're working with athletes who have been injured directly, or are you using existing data sets or how does that work?

Garrett:

So I'm using existing data as well as data that's being collected right now. I'm going to be using data, Not all of the data is collected yet. But once I integrate it into my paper, it will be done so it's very fresh still. The professor I'm working with is the main PI on those studies, and that's where I'm getting that data from. I'm not working individually with the athletes, but I'm working with the one who is.

Ken:

So let's say you're working with, let's say there's an athlete who's coming back from an injury, right? And I assume that they're working, they're training or working on equipment and that somehow their exercise performance is being recorded somehow. Is that how it works?

Garrett:

So we're having them do physical tests, like I mentioned previously, like hopping. And we're actually recording them and going back and looking at the recordings and finding anatomical landmarks. So things like their hips, their knees, and seeing like measuring degrees of tilt and different things that might tell us, oh, okay, this isn't optimal movement. How is this playing in the, how is this playing into their results? So we're going back, reviewing it.

Ken:

Interesting are you're watching video then?

Garrett:

Yep, yep, so we're doing it in person and then going back and watching the video and analyzing it. And that's where a lot of the data analysis is coming from.

Ken:

Wow, fascinating. When you were a kid, you know, is this one of the things you were imagining or picturing for yourself or can you remember some of the first things you thought you might want to be when you grew up?

Garrett:

Yeah. When I was younger, I mean, I up until a certain point in high school, let's say, I thought I wanted to do stuff with computers. I loved just like going through the settings on my first computer, ipod and just playing with things. But I very quickly got turned off to the whole technology side of things, and I actually, I injured myself. I was doing physical therapy for my shoulder in high school, which is where I initially became interested in it. And then after my freshman year of college, I had knee surgery, so I was doing physical therapy on that for a while. And that's where my initial interest was sparked. And then, like I mentioned previously, I did an internship at a personal training gym. And this is where I realized this is definitely what I want to be doing. I love working with people, building relationships with people, and seeing the impact that that can have on their life as well has been very rewarding already. So getting to take that into a career is something that has definitely been exciting for me.

Ken:

Okay. So a shoulder injury and resulting physical therapy got you into that world a little bit and you had a glimpse of it.

Garrett:

Yeah. She, she used to put the protract, the big protractor up to my shoulder, measure my range of motion. And I'm like, oh, what are you doing there? I started to get interested in that kind of stuff and I would just I was just curious. I would ask questions doing the exercises at home a lot. I was just interested in how they worked. I didn't understand what they were trying to do with all these exercises. So that point that I made to try to understand all that is

where that interest kind of was beginning to spark and it started to snowball for me.

Ken:

Well, this has been really interesting to hear about, and it sounds like you've got some great things on the horizon.

Garrett:

Thank you.

Ken:

So good luck with all that. And thank you so much for coming in and talking to us.

Garrett:

Thank you. I appreciate it.

Ken:

Thanks for listening to Indie Major. If you'd like more information about individualized and interdisciplinary studies at the University of Connecticut, please visit our website at iisp.uconn.edu. That's iisp.uconn.edu. We'd also like to thank UConn Enrichment Programs and WHUS UConn Radio for their support of this show.