

INTRO

Stephanie Jackson: Now That's INTAresting. This podcast is about the Georgia Tech Sam Nunn School of International Affairs, its graduates, their careers, and how the Nunn School has helped to shape their future. Take a listen.

Stephanie Jackson: Welcome back to *Now That's INTAesting*. I'm Stephanie Jackson, with the Nunn School.

Sydney Piwonka: And I'm Sydney Piwonka.

Stephanie Jackson: So today, we want to welcome Erin Kowalsky, who is a senior at Georgia Tech, who will be graduating this fall with a Bachelor of Science in Environmental Engineering, and a Minor in International Affairs.

Sydney Piwonka: And while at Georgia Tech, Erin has participated in multiple internships as a Water and Wastewater Intern at Barge Design Solutions and as a Water and Environment Engineering Intern at WSP USA. In addition, Erin is a Student Assistant at the Georgia Tech Research Institute, having worked there for over two years now.

Stephanie Jackson: So welcome to our podcast, Erin. We're glad to have you here today.

Erin Kowalsky: Yeah. Glad to be here. Thank you.

Stephanie Jackson: Good. So, to start our conversation, we want to know a little bit more about your decision to declare a Minor in International Affairs. Why did you choose the International Affairs Minor with your Environmental Engineering degree?

Erin Kowalsky: Yeah, definitely. So, I've always been interested in international issues, and actually, the reason that I chose Environmental Engineering specifically is because I want to work on sanitation issues globally. And so, when you're looking at working on global issues, I feel it's super important to understand the communities that you're going into and understand that different people have different cultures and international norms are not the same as what you're used to. So, I really wanted to get a broader understanding of how the international framework works and how International Affairs plays into all that engagement on a different level so that's kind of how I got started in it. So, it, it was, it was going back to just wanting to do international work and wanting to understand that.

Stephanie Jackson: Yeah.

Erin Kowalsky: And then, I also, my first class that I took in International Affairs was Intro, Introduction to Global Development with Dr. Fuentes.

Stephanie Jackson: Okay, yeah.

Erin Kowalsky: Yes, and I loved that class. I thought it was incredible. It was so interesting. It was exactly what I wanted to be working on. And at that point, I was a freshman, so I haven't even taken any Environmental Engineering classes yet. So, I really felt like I was learning about something that I was passionate about, so it was awesome.

Stephanie Jackson: Awesome. I also noticed that, so you know, with the International Affairs Minor, you have some choices in terms of your coursework. And so, it looks like you've taken a range that kind of highlights the diversity of International Affairs. So, you took Soccer and Global Politics, right?

Erin Kowalsky: Oh, yes. Yes. That was such a great class. I highly recommend my class to anyone who is even a little bit interested in soccer. I thought it was just really interesting because, actually the reason I took that class is I never really liked soccer, but the FIFA World Cup was hosted in South Africa. And I'm from South Africa, actually.

Stephanie Jackson: Oh.

Erin Kowalsky: And so, my dad got to go to the FIFA World Cup, and I was so jealous.

Stephanie Jackson: Yeah.

Erin Kowalsky: And I, after that, I started watching soccer, because I just thought it was so cool.

Stephanie Jackson: Yeah.

Erin Kowalsky: So, that class was amazing. It was just so interesting to see how soccer is such a connecting force between people. And you could move to any country in the world and people will understand soccer--even if they call it football, they'll still understand it. So, I thought was great.

Stephanie Jackson: Great. You also see, you took the Global Issues and Leadership class. That's the one with Dr. Bankoff?

Erin Kowalsky: Yes. Wow. That was an incredible class. That was, that was probably one of the most rewarding experiences I've had. For that class, when I took it, we were looking at like massive global issues and how, and we were working on a team to try and solve them. So, one of the problems that I really found super interesting was talking about water shortages in the Middle East and how that's related to a lot of the conflicts there. And so, we were working with students from Sciences Po in Paris and a student from Moscow. And it was just so interesting to work on these problems that were really broad and really, you would think there's no solutions to them, but from an international perspective there's, there, there are.

Stephanie Jackson: Yeah.

Erin Kowalsky: And that we were learning from, we were hearing from experts in the field. General Breedlove came and spoke to us, and we presented to him at some point. That class was really, really rewarding. It was

Stephanie Jackson: Good.

Erin Kowalsky: It was a great experience.

Stephanie Jackson: Good. That's great to hear. And the other class you took I found was interesting, you took the Scenario and Path Gaming course as well, right?

Erin Kowalsky: Yes. So, that was, that was definitely, I don't think I fully understood what Scenario and Path Gaming meant before I started the class. I didn't really understand that it was war gaming. But it was so interesting. I had never done anything like that. And we actually played a scenario out and got to

design scenarios in that class. And Dr. Jordan is amazing. So, it was a really cool class. I would not have known anything about nuclear deterrence if I hadn't taken it, and it was very eye opening.

Stephanie Jackson: Yeah. Yeah.

Erin Kowalsky: So, it was cool.

Stephanie Jackson: So, that's good to hear that you actually took advantage of the breadth of the different fields or subfields—I should say—within International Affairs that you actually exposed to that.

Erin Kowalsky: Yes. Definitely. I feel like all the classes that I took were very different, but all really, really great experiences.

Stephanie Jackson: Good. Good. Thanks for that.

Sydney Piwonka: Yeah, that's awesome. And so, shifting a little bit to some of the opportunities that you've been able to have during your time at Georgia Tech, so you participated in two internships one with Barge Design Solutions and the other with WSP USA, correct?

Erin Kowalsky: Yes, yes.

Sydney Piwonka: Okay, awesome. And so, how have you been able to apply the skills that you've learned during International Affairs courses or some of your other coursework during these internships?

Erin Kowalsky: Yeah, that's a good question. So, when I was working on those internships, it's actually interesting because, because they were so different from one another because I actually interned for WSP this summer. And it was all virtual because it was during COVID. So, it was, it was a very unique experience. But I, I would say the way that I used a lot of my coursework in these internships is I feel like the classes that I took really gave me a foundation for the theories behind a lot of the applications that I was doing. So, when I was working this summer, I was designing relocations for utility lines for the city of Atlanta, for their water lines. So, whenever somebody makes a road, when the Georgia Department of Transportation designs a road, we have to make sure that the water utilities were going to be not interrupted by that. So, it was a really cool thing to be able to design that. But it in a weird way, it kind of is a little bit related to International Affairs because I feel like there's a lot of bureaucracy and a lot of agencies and roles in utilities work that we don't always think about, because when we turn on our water, we just expect water to be there. But there's a lot of planning that goes into that.

Stephanie Jackson: Right.

Erin Kowalsky: So, I think International Affairs really lays the foundation for an understanding of how bureaucracies work together and how countries have to plan, and I thought it was, it was cool. It's cool to think about it in that way, as well. And then, of course, my Environmental Engineering classes really helped prepare me for that design work and understanding that.

Sydney Piwonka: Yeah. Yeah, that's great. That's awesome that you were able to apply some of that stuff during your internships as well. And so, during these internships, what would you say was one of the experiences that you learned the most from or that could help you in your future career during these internships?

Erin Kowalsky: Yeah, definitely. I think the experiences that I learned the most from was I learned that a lot of what we learn in our classes is very, theory-based and very technical, but it doesn't necessarily tell you how to do it in that one scenario. What we're really being taught is how, is how to apply what we know and how to think of different solutions to different scenarios. So, I guess the, the experience that kind of helped me the most is, and I learned from the most was that, you really do learn a lot on the job, so there was a lot of software that I was learning on the job. There were a lot of programs that I didn't know initially, but because I had an understanding of how to kind of learn on the fly it was a lot more manageable than you would expect to learn an entire software program in one summer. So, I think that's something that I'm really appreciative of that experience. And then, I just loved being able to go out into the field, so I really enjoyed being outdoors. So, for my internship at Barge, I was able to go out into the field. I would go blow fire hydrants which is like when you're testing the pressure drops across the lines, you can turn on the fire hydrants, and they go really, really fast. And it's, it's cool to see. So, that was probably the most fun just because that's something that I had learned about in class, but to actually see it in person, it just makes so much more sense.

Sydney Piwonka: Yeah, that's awesome. And I think that you also talking about how much you learned during those internships, I think is really cool and really important, because those internships, and for everyone, internships, I think you definitely do learn a lot throughout those. And so, for students who may be considering pursuing internships either similar to those that you have done, or just other internships during their time at Georgia Tech, what advice would you give to them?

Erin Kowalsky: Oh, yeah. Definitely. Well, I would say that work experience is really rewarding because it is a, your chance to apply what you know and learn new things. So, I think that's a really good thing to pursue if that is the course that you want to take. And the advice that I would give is talk to people that are like one or two years older than you. Talk to your peers that have like been through it. Because you don't know what they know, and they can really help advise you and mentor you in some situations. And those connections can help you kind of figure out where you want to be in what you want to be doing. So, I think that was what really helped me is that I has a lot of people in my major that were, had done it the summer before me or the year before me. And so, being able to ask them questions really helped. And they could tell me about the companies that they had worked for to help me figure out where I wanted to be. And what I want to do.

Stephanie Jackson: Good.

Erin Kowalsky: Yeah.

Stephanie Jackson: Great. So, speaking of work experience you're, you're working as a Student Assistant at GTRI?

Erin Kowalsky: Yes, yes. So..

Stephanie Jackson: So, what's, what are the responsibilities there?

Erin Kowalsky: Yes, so, for GTRI, I work with, I mainly work as a Teaching Assistant for the VIP Humanity Tech, which is one of the VIP classes. And through that, I've actually been involved with this Vertically Integrated Program for about six years, six semesters now.

Stephanie Jackson: Okay.

Erin Kowalsky: So, I was first a student, and then, I became a Teaching Assistant for the course. And through that course, the main goal of the class is to allow students to work on innovative technology solutions to problems in resource-limited communities. So, one of the projects that I've been really involved in throughout my time at Georgia Tech through that class is I actually got to go to, over spring break my second year, I got to go to Kenya. And we, visited a school there called the Beverly School of Kenya. It's the first STEM-based school in all of East Africa. And the whole goal of the school is to teach students a STEM curriculum and inspire them to get involved in the STEM fields so that they can help develop their communities and their surrounding areas. So, the project that we, so it's really, number one very, very cool to be able to go there with Georgia Tech and experience that. And we did an Environmental Impact Assessment to see how we could help with the sustainable development in that area. And so, projects that we've been working on is we noticed that there was a lot of people in the, it was, the school is located in a very rural area, and they would burn their waste. But when they were burning their waste, they would also be burning plastics, which releases a lot of toxins into the environment and it's been linked to a lot of cancers and harmful effects on human health and ecological health. So, one of the solutions that we kind of came up with to address this is that we were going to build a plastic bottle greenhouse. So, we were going to collect the plastics and build a greenhouse out of that waste to kind of teach the students. So, it's all integrated into the curriculum as well. There's, because education is such an important part of sustainable development, and it kind of shows the students a different way of thinking about waste and how to repurpose waste. So, that was one of the projects that I've been involved in. Another project is actually building an anaerobic digester, which takes, the region that the school is located in most of the people are dairy farmers, so it's a very dairy intensive region. And the cow manure is kind of a waste product that's underutilized, if you ask me. So, one of the solutions we have for that is we are building anaerobic digesters that biologically digest the waste into methane gas. And this is a cool solution because Kenya recently banned all wood byproducts, because there's a lot of deforestation in the area. And when they banned the wood byproducts, most, there was a high percentage of the people used wood to cook on cooktop.

Stephanie Jackson: Yeah.

Erin Kowalsky: And there's no alternative now. So, people had to buy wood, and the school had to buy wood, kind of illegally, because that is, that resource is now banned. So, with the anaerobic digester, if you digest your excess waste of cow manure into methane gas and trap that gas and use that as a cooking alternative, that is a cool solution to use the resources that are available to you.

Stephanie Jackson: Right.

Erin Kowalsky: As a way to cook. So, it's been a really rewarding experience. I really enjoy the community partnership, working with other students on this project. It's been a really awesome experience.

Stephanie Jackson: That is so exciting to hear that you had that experience and got a chance to go to Kenya to travel, and what the VIP project teams, the kinds of exposure that is giving you.

Erin Kowalsky: Oh, yeah.

Stephanie Jackson: So, what kind of advice or what advice would you give to students who are thinking about undergraduate research or have heard about the Vertically Integrated Projects, what advice would you give them to get involved or to even consider it?

Erin Kowalsky: Yes, definitely. So, I think, undergraduate research is an amazing opportunity. It's really what has helped me kind of figure out what I want to do, and I think that students, the easiest way to get involved is Vertically Integrated Projects is actually a class, so, you get class credit for taking this class. So, you can apply to register for one of the classes and become involved in that way, and that's kind of a really easy way to become involved initially in undergraduate research. I also work in an undergraduate research, in, in a lab. I work in Dr Brown's lab in the Environmental Engineering School. And the way to kind of become more involved in research with professors is really to talk to professors. If you read their papers and you find that you're interested in what they're doing, reach out to them. They would really appreciate it. They're really, really helpful in that regards, and they want you in their research. So, that would be my main advice for that.

Stephanie Jackson: Great.

Sydney Piwonka: Yeah. And so, looking forward a little bit, after you graduate this fall, so is there any job or company that you would like to pursue, either throughout your career or directly after graduating?

Erin Kowalsky: Yes. Yeah, so that's a, that's a great question. So, I've actually, I'm really appreciative of my time interning, and I really enjoyed both of the companies that I worked for. But I actually have decided to pursue graduate school, so I'm applying to start grad school in Fall 2021. I kind of realized that I love research, and I think research is something that I want to be more involved in. So, hopefully, hopefully that works out.

Stephanie Jackson: Yeah.

Erin Kowalsky: We'll see how that goes. But I think there are a lot of great Environmental Engineering companies that I would be happy to work for in the future. I just enjoy research at the moment and would like to continue doing research.

Stephanie Jackson: Yeah. When you've had that kind of success with your research, that sounds like a great inspiration to continue it.

Erin Kowalsky: Oh, thank you. Yes. Yes, I think so as well.

Sydney Piwonka: Yeah. That's awesome. That's super exciting. Is there anywhere in the future where you see International Affairs overlapping with your career? I know that you had said that you want to work with Environmental Engineering globally, so do you see International Affairs, or your minor interacting with that in any way?

Erin Kowalsky: Yes, definitely. So, I, I don't fully know where my path will lead at the moment, but I do know that I want to be involved in an international setting. I want to continue to do research on sustainable development, sustainable waste management, and I think it's really important to understand the International Affairs that play into those issues and, as well as the cultural and social issues as well. So, I, I fully believe that I will be using my International Affairs Minor throughout my

career. I'm not really sure what that is yet, but I know that it will involve, hopefully, a lot of international travel, after COVID.

Stephanie Jackson: Yeah.

Erin Kowalsky: Has cleared up.

Stephanie Jackson: Yeah. Exactly. So, just to wrap up, one final question for you. So, given all your experiences and your exposure to the theories and the practical applications of International Affairs, what last words of advice would you give to students who might be thinking about pursuing a Minor in International Affairs?

Erin Kowalsky: Oh, definitely. I would, I have two pieces of advice, actually. My first piece of advice is, I believe that choosing classes based on how interested you are in them has been one of the main reasons for, I want to say success in International Affairs, but how much I loved getting my minor. So, I really chose classes that I thought were super cool and interesting, and that really made it a great, great experience. So, I would say, talk to your friends. Talk to other people about what's going on in the Sam Nunn School. I really spent a lot of time reading those course descriptions, and I thought it was great. It worked out really well. And my other piece of advice is, there's a lot of really interesting faculty at the Sam Nunn School that have really interesting exposures, and I would say just talk to them. They are very approachable. And I think it was, it was really great to just form those connections that I wouldn't have made otherwise and if I hadn't taken those classes. So, I think that was, that was my main piece of advice is read those course descriptions and talk to people.

Stephanie Jackson: Awesome. Awesome. We since started moving our course descriptions to video trailers.

Erin Kowalsky: Oh wow.

Stephanie Jackson: So, watch the videos too.

Erin Kowalsky: Oh, that's so cool.

Stephanie Jackson: Watch the videos. Read the course descriptions. I think that's great, a great piece of advice. Well, Erin, thank you so much for joining us today on our podcast. Congratulations on your impending graduation as well. And we look forward to hearing about your future career and academic success, so we wish you all the best.

Erin Kowalsky: Thank you so much. I appreciate it.

Sydney Piwonka: Thank you.

OUTRO

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