

An Interview with Cathy Cahill, IS 1987

by Daniel Swain

The following is an interview with Cathy Cahill, former Integrated Studies student (1987) and current professor at the University of Alaska, Fairbanks. I interviewed Cathy, an atmospheric chemist, because I am majoring in Atmospheric Science and was interested to hear about her experiences in the program as an intensive science major.

When were you in IS?

I was in Integrated Studies winter quarter of 1987 and spring 1987. I got in a quarter late.

Did you start out at UC Davis in the fall and then decide to join the program later on?

The program was taking 100 students, but they were full. Somebody dropped out and they asked me to move in.

So it was sort of an unexpected opportunity?

It was.

Was there a residential component to the program then, as there is now?

There was. There were 100 students on floors four and five of Bixby Hall.

It has been my experience that having so many like-minded people living together in the same building has fostered close friendships and a close-knit community.

Yep. We all hung out together—the friends I made in Integrated Studies I stayed close to the whole way through my college education.

Did you go on to live with these people later when you had to find your own housing?

I hung out with them, but I actually ended up moving home for my junior and senior year. During my sophomore year, though, a bunch of us in Integrated Studies students moved over to Gilmore Hall. So, we stayed together.

It sounds like you definitely maintained that sense of community beyond the Bixby experience.

Yes we did.

I'm assuming that because you're a professor of atmospheric chemistry...

Yes—I'm actually in the Chemistry department, but my research is air pollution...

...That when you were at Davis were you a declared pure science major?

I was Applied Physics.

So, what did you think of the IS program coming from that perspective? A lot of the IS classes have a real emphasis on the humanities or social sciences—did you take any classes in IS that you might not otherwise have taken?

I did indeed. The IS core courses were definitely liberal arts—the one that I remember the most fondly was Society through Literature in Modern Europe, which Dan Wick taught, and we affectionately referred to as “SLIME.” It was a great course. And it definitely exposed me to some books and other things I wouldn't have encountered otherwise. And I really did enjoy the IS classes. They were definitely things that I did not need for my degree. But they were fun, and it was nice to be in there with a bunch of people that I knew, and it was broadening in terms of my humanities exposure at Davis. These were things that were not General Ed. requirements.

I guess that's the idea behind Integrated Studies—bringing together disparate areas of study, people who are science majors who wouldn't normally have taken some of these humanities classes, or vice versa. I think that's definitely part of it. That one class was one that stood out in your mind as a particularly good one—were there any others that were either interesting in a positive sense or notable in their...

I enjoyed all the IS courses I took. I don't remember them all off the top of my head at this point—it's scary, but it was 21 years ago—which really scares me—but I remember I also took Society through Literature in Central America, and I took Nora McGuiness' Shakespeare course, but I don't remember all of the details. I just remember enjoying them. And I still have most of the textbooks from each of them.

Do you think that any of these classes, even if they weren't directly science-related, might have helped you direct yourself in later years?

I think they helped me in terms of my writing skills and my analytical skills and also with constructing well-written arguments. They taught me how to read and synthesize things. But in terms of my actual career choices, they didn't have that much of an impact, because I was pretty science-focused already.

I would say that I'm in the same boat that you must have been at that point—I've heard the same thing from a lot of people—that IS didn't necessarily change their direction, but it certainly helped them improve in areas that were not necessarily their strong points or engaged them in the subjects that interested them most.

Right. Now, I actually teach on a regular basis Chemistry 434W, which is a senior-level writing-intensive laboratory course, called Methods in Physical Chemistry, so all the work on grammar and reasoning goes into teaching my students how to write technical reports. And now I spend a lot of time editing!

It's definitely important, especially in the sciences, to be able to communicate clearly. I believe IS now has a science or technical writing option for juniors or seniors in the program—do you know if that was around when you were in the program?

It wasn't. When I was there, it was purely a freshman program. It was one year; that was it. So having the more advanced stuff would have been really nice.

I guess that's something that they must have started recently, then. Do you have any other stories about IS? How about socially? You mentioned that there was a very close community in Bixby. Was there anything interesting that went on there?

We were a bunch of wild kids. We had a lot of fun, and many friendships developed there—some of the other people I was with in Integrated Studies were also in the sciences and we would be lab partners in later classes. I remember that some of us would go on top of Phys/Geo building in the middle of the night to shine laser beams across campus. There were definitely good friendships that formed, and we basically goofed off all the way through college on nights, weekends, etc. One of the biggest things we discovered in terms of laser beams on top of Geo is that you can make people follow the bouncing red dot, but they never look up! It was a lot of fun, and people did party together. We got together and did things on weekends. Everybody was in everybody else's room.

There were floor-wide parties. People had a good time.

So was shooting the laser beam from the top of the geology building something that you did on a regular basis?

Oh, no—not on a regular basis! But that semester we were all taking Optics, so we had access to all of the optics labs and lasers. I worked for the air quality group, so I had access to the fifth floor and the roof of Physics/Geology. So we spent some quality time up there.

Very cool.

It was fun.

I think it depends on the year and the people involved, but there always seems to be something that goes on late at night—Sardines in the Death Star, or, apparently, lasers off the Geology building...

Yeah, the Death Star wasn't there at that point. We were all safe from the Death Star.

Is there anything else that might be interesting for people to know about your experiences in Integrated Studies?

I think the most important thing is that it was a really good experience that brought me together with people who became friends throughout college, and it broadened my horizons with regard to the humanities above and beyond the General Education requirement. I think it was a very worthwhile thing to do—to put that many bright people together in the same spot, and just let them teach each other about what they were doing, and to have fun.

And how about UC Davis in general, not just the IS program specifically—how do you think that your experiences here influenced your direction later in life, especially to become a professor yourself at another university?

UC Davis was a fabulous experience for me. It was at that point more selective than Berkeley in some ways: it only took the top eight and a half percent of high school graduates in California; it was supposed to take the top twelve and a half percent, but our chancellor wasn't playing ball at that point, so it was very selective. So it was really focused in terms of the undergraduate education in terms of having faculty in the classroom. I got through Davis with only one graduate student teaching a class. At most

schools that I've been to, you're lucky if you get a professor. At Davis, you have the professors, you have the one-on-one experience, you have the opportunity to research and work in the field, and that really highlights your love of learning and the direction that you want to go because you can talk to your faculty member about where they would recommend going and how to approach these sorts of things. You're not just a number: you're a person, and the faculty cared about you. That was a wonderful experience.

I try to teach the way my favorite professors at Davis taught. Some of my professors won teaching awards. I had Glen Erickson for Mathematical Methods for Physicists. I had Kevin Roddy for Medieval Studies. I had just a whole bunch of very, very good faculty members. They cared about their students, and they really made the students feel important, and they were tough—I mean, they were not easy faculty members, but boy—you learned stuff, and you came out of there feeling like it was a really good experience. And I've tried to imitate that in my teaching. And I think Davis gave me a really strong foundation for all of my graduate work. I went in and I did not feel like I was completely overwhelmed. I had a lot of confidence from my work experience. I knew what I was doing, and it was really a good overall foundation across the board. I would recommend Davis to anybody.

Now as a professor at a school that is a lot smaller than Davis, I try to take what I learned there and apply it to smaller classes, to work one-on-one with students to really get them engaged in science and show that it's fun—you experiment and don't know the answers—and it's a learning experience that is truly enlightening. So, I seriously recommend that people go to Davis. It's a great school, and I loved my time there. If it weren't in California, I'd consider going back. I love Alaska, so I'm a little biased.

Obviously UAF is a smaller school than Davis—but they are both research-oriented, very science-intensive places. Do you see any other similarities between them?

The town of Fairbanks to some extent reminds me a lot of Davis. It's about the same size. Fairbanks is so conservative or libertarian. Davis is so liberal or conservative. But there's a strong sense of community in both, which I really appreciated. So, to some extent, Fairbanks felt like Davis. I grew up in Davis, so for me Davis was home and to me the community in Fairbanks felt very similar. And in terms of the attitude of the faculty towards the students, it's very similar. A lot of the faculty goes way out of their way to help you. In Fairbanks, you either like living here or you move. It's so extreme you don't get to just settle in. And a lot of the faculty who are up here could really go to any university in the country, but they're here because it's Alaska. That love of the state and the desire to stay here really comes through to the students. In Fairbanks, we try to "get the fledglings out of the nest"—when you've got grad students who aren't graduating, you really want them to

go out, to graduate, to be successful. But they love Fairbanks so much they don't want to graduate, because there may not be a job in Fairbanks (we don't have much industry here). It's a case where students delay graduating, which drives the faculty crazy, but students love it here.

A lot of people in Davis graduate and they want to stay in the area because they like it—I think there's a lot of similarity there. And in terms of the science, getting your hand on the best equipment around, Davis has the advantage there, because of course you've got a lot of industry putting money into the school, a lot of research money, so you have the opportunity to work with top-notch equipment. Here at UAF, the way we get the equipment is through National Science Foundation grants. So in both cases, students have access to really top-notch equipment. How you get it is a completely different story. If you are motivated and interested there are opportunities to work with faculty in both cases. That's very important for an undergraduate, because it really helps form what you are going to do and why you are doing it. And I think both schools foster that. Especially the Physics Department when I was there.

That's certainly the experience that I've had in my one and a half quarters here so far.

Good luck with putting together all of the hundred-year history stuff, and good luck at Davis. Enjoy your time there—it's a neat place.

Thank you very much, and good luck finishing out the winter up there in Fairbanks.