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Fearless Friday: Kirsten Crear

Abstract
Even in her last semester here at Gettysburg, Kirsten Crear ’14 is fearlessly working to make changes for the future of the campus community. This semester, Kirsten introduced a STEMinists club on campus that will give female students who are STEM (an acronym for Science-Technology-Engineering-Mathematics) majors the opportunity to come together and create a community, share and discuss the difficulties they face as women in their fields of study, and support and mentor each other as they prepare to enter their fields.

Kirsten is passionate, driven, and determined, taking the initiative to bring this group of women together on campus so that together they can begin to challenge the norms and stereotypes about women in their fields, creating change for the future. [excerpt]

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Disciplines
Education | Educational Leadership | Engineering | Mathematics | Science and Mathematics Education | Science and Technology Studies

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Surge is a student blog at Gettysburg College where systemic issues of justice matter. Posts are originally published at surgegettysburg.wordpress.com Through stories and reflection, these blog entries relate personal experiences to larger issues of equity, demonstrating that –isms are structural problems, not actions defined by individual prejudice. We intend to popularize justice, helping each other to recognize our biases and unlearn the untruths.
Even in her last semester here at Gettysburg, Kirsten Crear ’14 is fearlessly working to make changes for the future of the campus community. This semester, Kirsten introduced a STEMinists club on campus that will give female students who are STEM (an acronym for Science-Technology-Engineering-Mathematics) majors the opportunity to come together and create a community, share and discuss the difficulties they face as women in their fields of study, and support and mentor each other as they prepare to enter their fields.

Kirsten is passionate, driven, and determined, taking the initiative to bring this group of women together on campus so that together they can begin to challenge the norms and stereotypes about women in their fields, creating change for the future.
Our Interview with Kirsten:

Surge: So, tell me about STEMinists. What is it exactly?

Kirsten: Well, STEMinists is a group that we started here on campus just this semester and we have about 30 members so far. We meet to talk about the challenges we face as women in STEM fields, not just right now at Gettysburg, but in the future in the workplace, too. Most of us are in physics, engineering, mathematics, computer science, biology, and biology/molecular biology.

S: How did you get the idea to start STEMinists?

K: We’ve been talking about starting this group on campus for at least three semesters now, and now we’ve finally decided to do it. There was a lot of interest and a lot of talk, and it all just came together this semester. The point of starting it was to bring women on campus together to talk about issues in our fields. There are a lot of these types of groups on other college campuses, so I figured, ‘Why not start one here at Gettysburg?’ And the results just this semester have been phenomenal. When women in STEM fields meet, there’s always an instant connection because there are so few of us in our fields of study.

I’m also very passionate about women in the workforce. I think that we’re really prone to view women in STEM fields through a set of stereotypes that just aren’t true at all. Especially in computer science, which is a field that’s only 30% women—which is terrible—there’s the stereotype that the women in that field are just nerds hiding behind glasses. And I’m absolutely not that person at all. When I tell people I’m a computer science major, people are shocked. There’s been a lot of talk, too, in the news and in the government recently about women already in STEM fields, and how to get more women involved. Last year the government did a lot of research on women in STEM because they’re realizing that the problem with having such a low ratio of women to men in these workplaces is that, when you have to think about problems from different angles to solve them, having a different type of brain helps you think about problems in different ways. And there just aren’t a lot of women in these fields providing that different type of brain to think through these problems differently.

S: That’s really interesting to see that they’re approaching the issue from a standpoint like that. It makes a lot of sense.

K: Yeah, because men and women think differently. Men
are more linear, and women like to expand their thoughts and then narrow in on the solution. That kind of thinking process could help any business make a better product, or foresee a crash or a bug.

And that’s why this is really important for me—we started STEMinists to make sure that we could get underclassmen, especially first-years, involved because there’s a lot of fear about whether or not, as women, we’ll be smart enough to be in the STEM majors and fields. It can be really intimidating. A lot of young female STEM students visit the heads of the STEM departments to see if they’ve got what it takes to make it in the field. That kind of mentality and insecurity needs to change.

The funny thing is that, if you ask STEM professors, they’ll tell you that their female students are often their more driven students. They’ll talk about how a male student will get a B on an exam and celebrate it as if it were an A, and a female student will get a B and be upset, kicking herself the whole time trying to figure out what she got wrong.

S: Have you seen any big changes in getting more women getting involved in STEM majors and groups on campus?

K: Well, one thing that’s really interesting is that my sorority, Sigma Sigma Sigma, just had all of its collegiate chapters convene here in Gettysburg and, at the end of the day, I met one of our alumni from Gettysburg College who told me that when she was a student at the college (which was only three years ago. She was a senior when I was a first-year), she was the only female computer science major. It used to be that there was really only one female CS student in every class. So, when I told her that I was a CS major, and that now we have 6 or 7 female CS students in the department, and that I just started a STEMinists group on campus, she got really excited.

S: What would you say are some of the biggest issues facing women in STEM fields, or, how do you think STEM fields might be limited because of the lack of women involved in them?

K: My biggest thing is just that people don’t know about the discrepancies there are in STEM fields and how important it is to have a diverse community—not just in terms of including more women, but having more people coming from different life experiences, races, classes, ethnicities—that’s all important for the environment of the group. I mean, I was not alone in thinking that I was going to be a sore thumb in a bunch of nerdy computer kids in the CS department. But that’s why I wanted to reach out to the other women on campus—to make sure that they know that we can fit into this environment, too. There are other women who felt like you and are doing just fine in their fields now. Like Marissa Mayer. Do you know about Marissa Mayer? She’s the President and CEO of Yahoo who took the job while she was pregnant—she’s a huge role model for me.

Once you get into the field, though, I think the biggest problem for women is to find mentorship. You mentor someone and decide to be their mentor, it’s usually someone who you see a bit of yourself in. It’s easier for men to see themselves in other men. The issue is that women don’t see themselves in other women—they see other women as competition in a male-dominated field. So, a lot of women find themselves without mentors because there’s that intense sense of competition.

S: Are you nervous about that? Have you experienced that at all?
K: There have been times that I’ve felt like I’m a girl in CS and I’m just navigating this whole thing by myself. My advisor has played a big role in helping me, which has been great, but there was never really a student who took me under her wing. I took Teresa under my wing and she was like, ‘if Kirsten can do it, I can do it.’ That was a really nice moment when she said that to me.

S: It sounds like STEMinists is going to be a great way to start making things change—not just while these students are at Gettysburg, but for when they leave here, too.

K: Yeah, the response I’ve gotten from campus has been amazing. Kasey Varner wrote a piece about STEMinists for USA Today, Surge is doing this piece on it, the CS department wants to get more involved, and three professors have wanted to become my advisors! I mean, the other day I posted on the Gettysburg Professional Alumni group on LinkedIn about coming in and for a panel discussion we want to organize and I got an overwhelming response.

S: So, moving forward, how do you think we should go about changing things so that more women get more involved in STEM fields from the start?

K: Well, it has to start early. The change needs to come in how we tell young girls what they are and aren’t capable of. The insecurities and doubts start the moment they hear that boys are smarter than girls at math and science. It piles up. They think they can’t do it, and eventually they can’t. We need to start changing that mentality and getting rid of those stereotypes because they’re stopping these girls from reaching their potentials.

The change needs to come in how we tell young girls what they are and aren’t capable of. For me, my mom owns her own company, so I learned early that women could do whatever they wanted and be successful in a male-dominated world. She was always the loudest one in the room, her voice was always heard, and I think that’s why I was so able to get into this field. I didn’t think twice about CS. When I came to Gettysburg and heard that there were only 6 women in this class of CS majors—which is the largest class of female CS students ever at the college—that’s when I realized that this was really going to be an issue. And I’m so excited to see how STEMinists can work to change things and empower the women we do have already in these majors and fields on campus.

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