

CURRICULUM DEVELOPMENT

Curious about what is happening in this landscape

Developing courses w/business and psychology

CS+X as concentrations with difference disciplines to bring into the CS major

What goes into the process of developing courses/curricula?

What factors are taken into consideration to provide an equitable experience for all students regardless of [lack of] experience and background?

Background in course development (X + tech) how courses fit into curriculum

Loosely coupled CS+X major

- Courses that focus not on programming but on generic algorithmic problem solving
- Students aren't interested in programming, but are interested in problem solving

NSF grant supporting courses being coupled together

- e.g. CS + Statistics courses working together
- Students in both courses learn something about the other discipline
- How do we push this much further to get CS+X across the campus/curriculum
- Working on real-world problem sets
- Challenges: people who think differently, understanding
 - Finding time outside of class to meet
 - Some meetings bring the classes together (same meeting time)
 - Meeting space can be an issue
- Not just CS, but any two disciplines

Experience working with French/HTML/CSS/XML suite

- Talked with museum studies on data preservation

The future of work, what pipelines are there?

- Academic resource center with curriculum resources
- What are the needs in computing?

Putting together a data science curriculum

- One course, multiple courses, program?

Creating a data analytics program, interdisciplinary focus

- Has an impact on majors numbers

Bryn Mawr created a CS+X minor (computational methods minor)

- 4 CS courses, 4th course depends on the X
- 2 courses in X that are computational in their own discipline
- Open to students in all majors, students came from all over
- Along came a minor in data science, situated outside of CS
 - More students interested in DS minor than CM minor in past 10 years
 - CS contributes, and earned some faculty resources to support it

Some departments are figuring out their students will need computational tools

- Being receptive, listening, building a network

Spelman

- Environmental studies
- Biology/informatics
- Let CS students choose courses like that to get some X into the CS program
- Figure out a subset of courses that would go well with computation
 - Give the students broader exposure to an X
 - Typically four courses in another discipline, work with the departments to get the minimum set to get to the more advanced ideas
 - Trying to get endorsement on the transcript
- Students are finding different kinds of jobs
- 7-8 CS courses plus 4 courses in the discipline
- Really important to work with other departments