Team Future Science: Inspiring life sciences research master students to provoke bottom-up professional change

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CHALLENGE
Foster professional attitude & job market orientation.

APPROACH
Career & academic skills course that spans the 2 year master curriculum, 3 EC.

EXAMPLE ACTIVITIES
Workshops & resources integrated into the program's existing curriculum.

OUTCOMES & LESSONS LEARNED
Team projects empower students to take initiative & build professional community.

Student perspective:

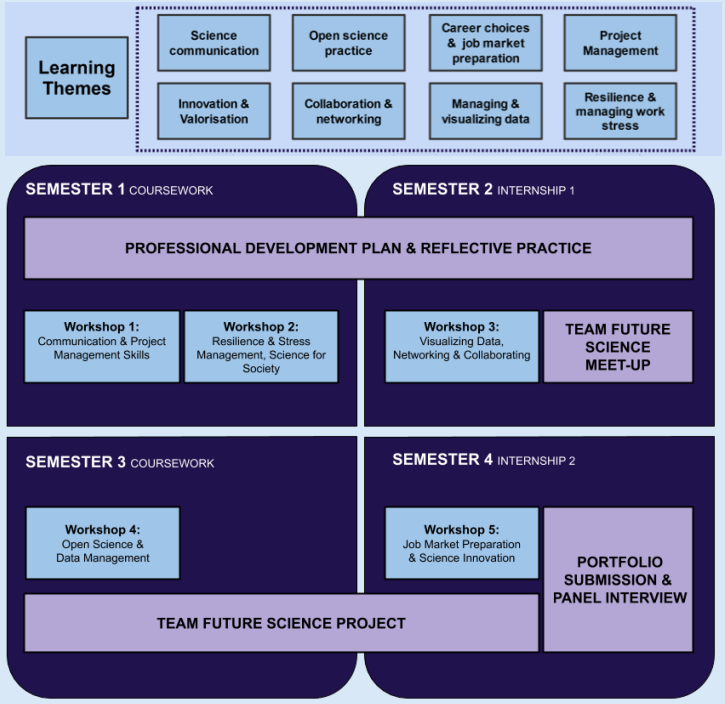
- *25-45% of our graduates will not finally pursue a PhD.*
- *National Student Surveys (NSE) evaluate beta program satisfaction lowest on job market orientation & professional skill bulding.*
- *Students who are overwhelmed are less likely to use career services & seek mentorship from program staff*
- *Many are eager to build their professional network and get involved in bottom-up initiatives.*

Teacher perspective:

- *How can we give a more comprehensive picture of life as a (PhD) researcher?*
- *How can we the bring students in contact with the stakeholders of our research and more potential employers?*
- *How can we encourage initiative-taking & professionalism throughout the program?*

Course structure:

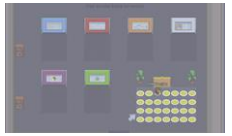
Students begin writing a **professional development plan (PDP)**. Workshop activities are timed to coincide with the ongoing curriculum. Team projects are monitored by workgroup tutor, mentor & formdesk proposals.



Workshop example: Managing & Visualizing Data

Before Class:

1-2 hours: **Knowledge clips & handbook resources** available beforehand. Students bring work samples from ongoing internship thesis.

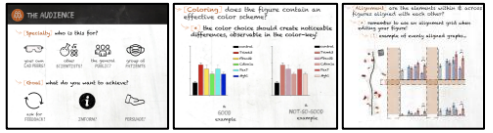



During class:

2 hours: Workgroups of 15-20 students, hosted on campus or in a virtual conference space.

In-class Activity: Analyze & discuss sample posters and generate a toolkit of best practices as a team. Group discussion.

In-class Activity: Use handbook checklist to exchange feedback in small groups on a thesis figure or graph.



After class activity:

1-2 hours: **Improve the graph/figure** & resubmit for feedback from tutor.
Discuss & reflect on data management "best practices" from internship lab.

Team projects & assessment:

Final Learning Portfolio includes samples of chosen skill building from PDP and 1 major project of 40 hours. **Sample student-initiated projects include:**

- SCIENCE COMMUNICATION PROJECT: Design a lesson for high school biology students with their teacher as mentor.
- JOB MARKET PREPARATION PROJECT: Organize and network at a site visit to a biotech company or an international research conference.
- NETWORKING PROJECT: Host a research symposium or career event, invite speakers & chair the session.

Want to see more? >>>

Lessons learned:

1. Workshop activities should be timed to landmarks of the ongoing scientific curriculum. *E.g.;* internships, local conferences or graduation.
2. Explicitly train students in the skills needed for the portfolio & professional development. *E.g.;* goal-setting, design thinking, reflective practice.
3. Facilitate regular drop-in hours & flexibility on workgroup scheduling and project ideas (strict, but limited criteria).