Non-Technical Workshop Topics

This document outlines suggested topics and structures for non-technical workshops intended to build the skills and awareness necessary for student success in higher education. These topics complement technical training and promote personal, academic, and professional development.

1. Foundational Skills for Student Success

Academic Resources at URI

- Academic Enhancement Center (AEC)
- Office Hours
- Faculty-Led Discussion Sessions
- Student Organizations: RamHacks, SLIC, SWiC
- Introduction to the CS Department

Non-Academic Resources

- Women's Center
- Gender and Sexuality Center
- Counseling Center
- Health Services

2. Study Skills and Academic Strategies

- Starting assignments early and using autograders iteratively
- Breaking down programming assignments
- Using Google Calendar for time management
- Online learning resources and responsible use
- Study group strategies and academic integrity
- Building persistence, resilience, and patience
- Recognizing and addressing imposter syndrome
- Overview of submission systems (e.g., Gradescope)
- Staying informed through Brightspace and Piazza apps

3. Motivation and Goal Setting

- Distinguishing intrinsic vs extrinsic motivation
- Exercises to help students identify why they study CS:
  - Passion for problem-solving
  - Career goals
  - Desire to positively impact the world

4. Communication and Question-Asking Skills

- Framing clear questions ("What are you really asking?")
- Debugging and isolating problems
- Email etiquette and examples of well-worded inquiries
- Best practices for peer and instructor communication

5. Academic Self-Awareness

- Reading the syllabus and understanding grading policies
- Calculating grades and setting realistic goals
- Understanding course structure and schedules
- Identifying teaching staff and their office hours

6. Professional Development

- Resume-building (suggest using LaTeX)
- Building a digital portfolio or personal website
- Creating/updating a LinkedIn profile with professional photos
- Mock interviews (technical and behavioral)
- Maintaining a clean online presence
- Career fairs and CS career exploration (Bureau of Labor Statistics)
- Technical writing and presentation skills

7. Research and Department Engagement

- Attend CS department lightning talks
- Learn about active research groups
- Steps to get involved with research and labs
- Becoming a CS TA or peer mentor
- Attending CS club events and department talks

8. Entrepreneurship and Freelancing

- Contributing to open source projects
- Building profiles on platforms like Upwork

9. Strong Programming Habits

- Problem-solving vs implementation
- Modeling solutions with whiteboards or pseudocode
- Faculty demonstrating problem-solving live
- Practicing debugging with syntax and semantic errors
- Using print statements, commenting code, and tools like PythonTutor

10. Technical Fluency Beyond the Classroom

- Mastery of core constructs: conditionals, loops, functions, classes
- Topics specific to CS211: recursion, pointers, references
- GitHub basics: push, pull, and live demo
- Navigating documentation and Stack Overflow
- Avoiding plagiarism and understanding ethical collaboration

11. Additional Practice and Equity Topics

- Hosting low-stakes practice tests
- Workshops on coding editor tools and IDE familiarity
- Activities exploring implicit bias, stereotype threat, and imposter syndrome