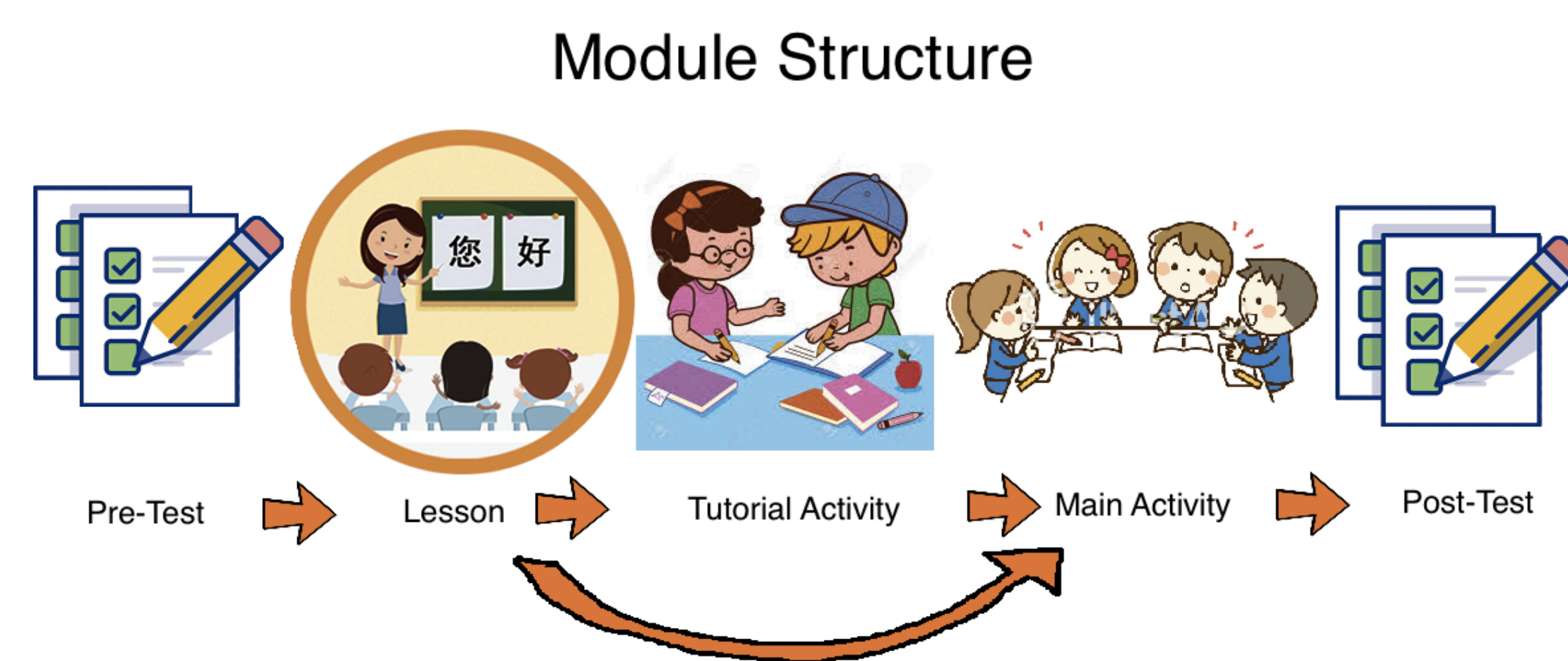


[illegible]

Literature in HCI education reported that students come to the course with negative preconceptions about HCI and thought that the content was too easy, the grading was too subjective, and the difficulty level to be not challenging enough. Various pedagogical strategies attempted in case studies to counteract these issues include using projects with real users, evaluation that is process rather than outcome focused, work that interest-driven, among others.

Every module has a pre-test and a post-test. Pre-tests help students identify learning objectives. Tutorials can earn back lost marks on pre-tests. Tutorials are designed to target basic competencies while main activities done in teams target module mastery.



More optional modules still need to be developed. Currently, the following are offered as core modules:

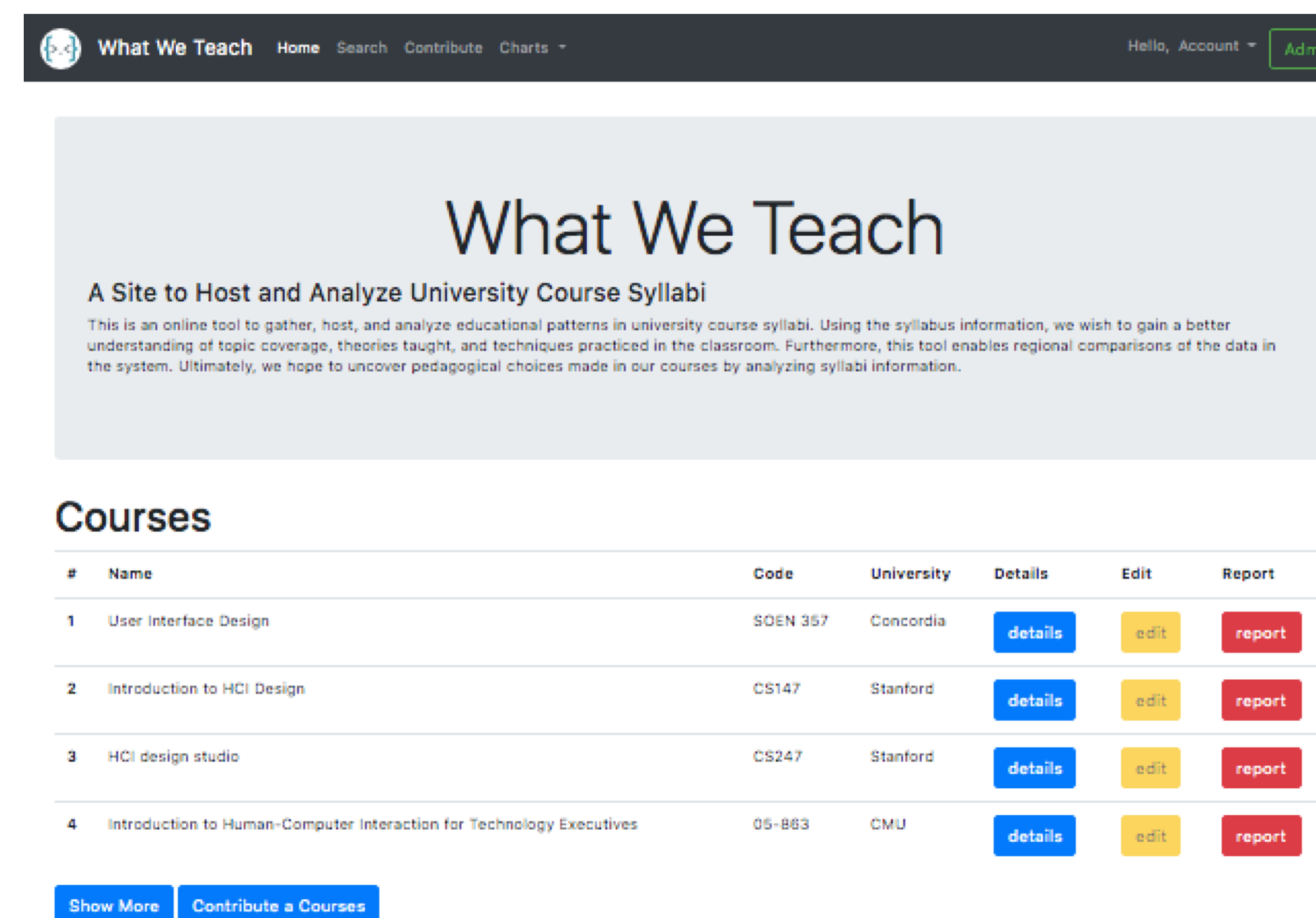
- What is HCI
- Course Logistics
- User Centered Design
- Design Rationale
- Usability Principles, Guidelines, Heuristics
- Prototyping
- Formal Models
- Alternative Interfaces
- Evaluation Methodology
- Heuristic Evaluation
- Accessibility
- Course Summary

Lessons were provided in advance so students read them at their own pace.

The recommended schedule was M/W/F.

- Mondays: Asynchronous lectures
- Wednesdays: In-class tutorial activities
- Fridays: In-class main activities

- J. Bulmer, M. Fritter, Y. Gao & B. Hui. **FASTT: Team Formation Using Fair Division**. Canadian Conf. of AI, 2020.
- K. Khademi & B. Hui. **Towards Understanding the HCI Education Landscape**. Koli Calling, 2020.
- B. Hui. **Lessons from Teaching HCI for a Diverse Student Population**. Koli Calling, 2020.
- B. Hui, O. Adeyemi, M. de Vin, B. Marshinew, K. Khademi, J. Bulmer, & C. Takasaka. **Teamable Analytics: A Team Formation and Analytics Tool**. Learning Analytics and Knowledge Conf. 2022. **Best Demo Award**.
- B. Hui. **Design Guidelines for a Team Formation and Analytics Software**. Computer Supported Edu. 2022.

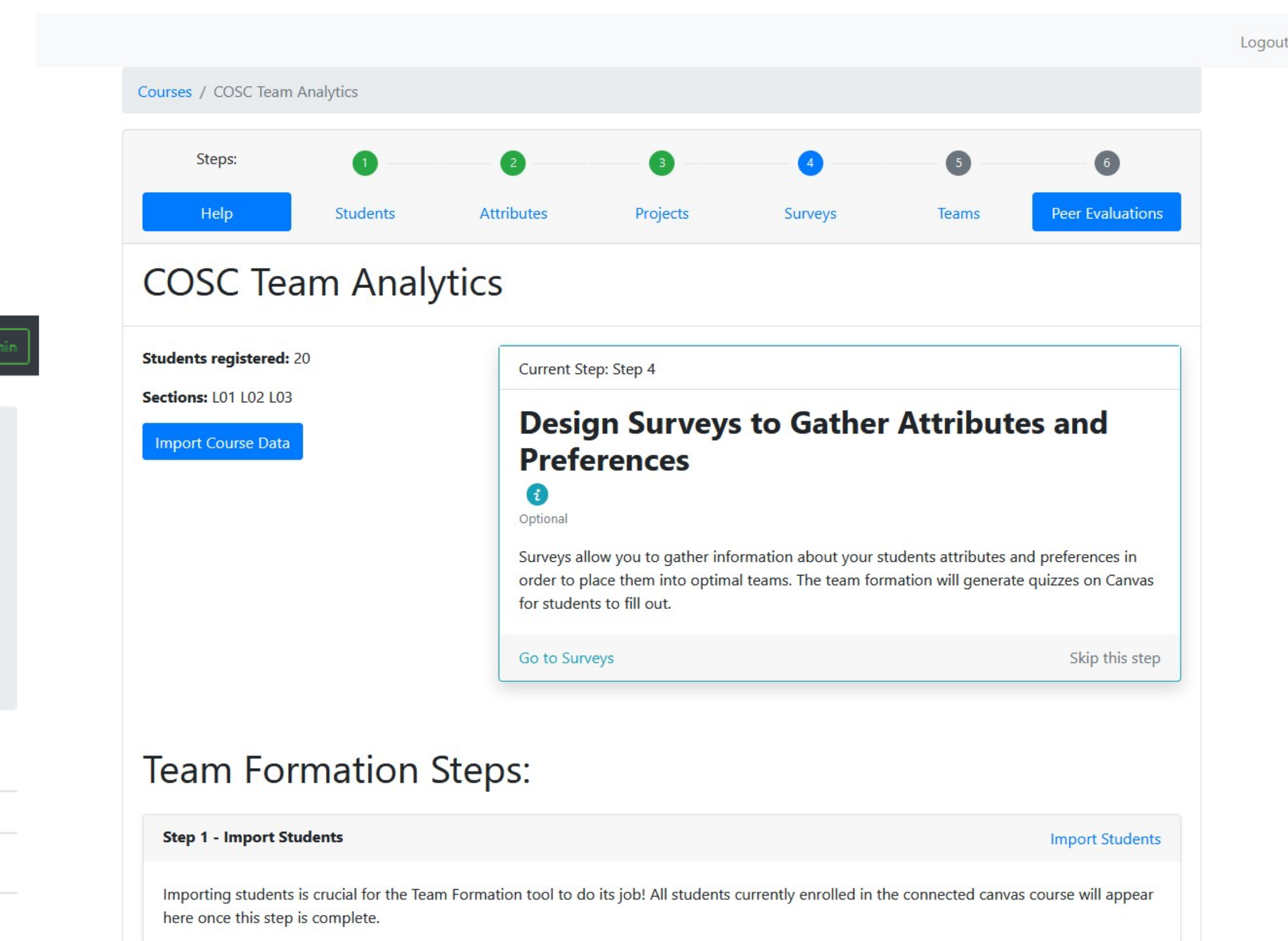


<http://whatweteach.herokuapp.com/>

To support team activities, we built Teamable Analytics that is fully integrated with the Canvas LMS. The main features include:

- Creating surveys to elicit student information
- Customizing instructor preferences for teams
- Forming teams based on student attributes
- Forming teams based on project needs
- Reviewing teams on the analytics dashboard
- Changing team membership manually
- Monitoring team performance through visual analytics
- Gathering peer evaluation student feedback
- Reconfiguring teams based on student peer evaluations

Teamable Analytics was successfully piloted in 7 classrooms with 15 to 200+ students at UBCV/O in 2021-2022.



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