



# INCLUSIVE AND EQUITABLE INSTRUCTION THROUGH OPEN COURSE DEVELOPMENT IN MATHEMATICS AND PSYCHOLOGY



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## Project Goals



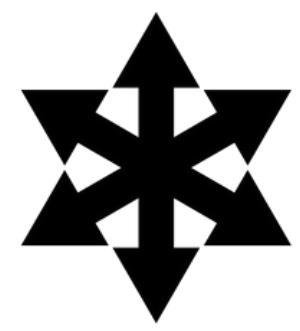
### Canvas Courses

We are developing a set of course sites on the Canvas platform



### Open

Courses are available to the entire GT community



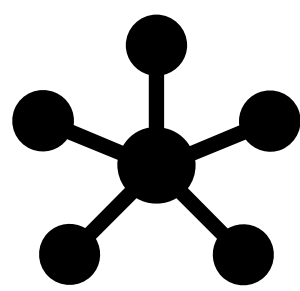
### Support Diversity

Support a wide range of students across campus



### Assess Impact

Course Surveys and Canvas Analytics track engagement



### Disseminate

Conferences, Canvas Commons, and OER Repositories

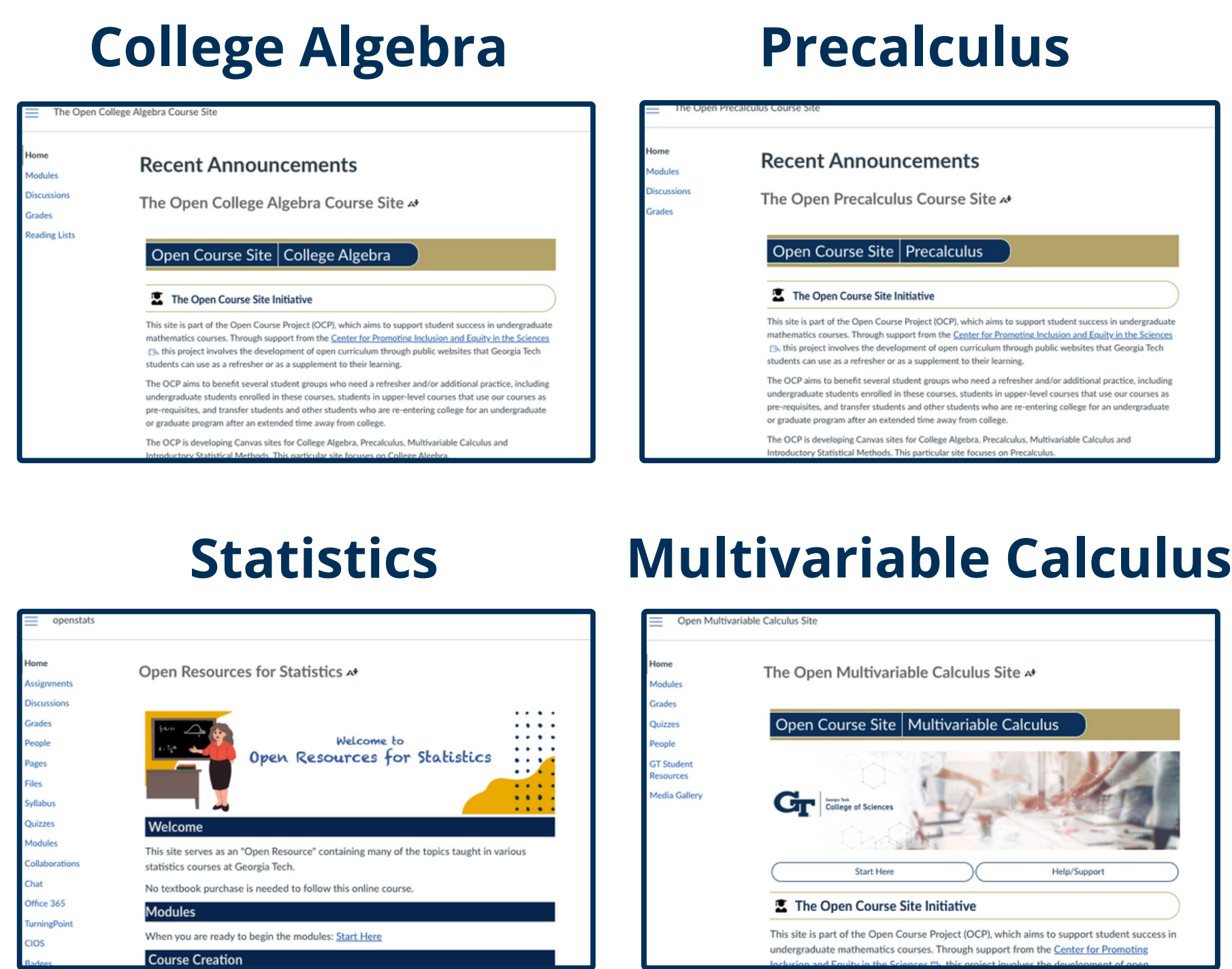
## Possible Use Cases

- Students in these courses
- Students in upper-level courses that use these courses as pre-requisites and need a refresher
- Students preparing for an upcoming course, project, or placement exam

## Project Timeline

- **May 2023**  
Funds available  
Curriculum development initiated  
Student assistants create & curate
- **Aug 2023**  
Course sites launched  
Sign-on required to track engagement
- **Oct 2023**  
Public sites launched - no user tracking
- **Dec 2023**  
First Year Assessment Report
- **Apr 2024**  
Development phase wraps up
- **Dec 2024**  
Second Year Assessment Report

## Course Development



## Features

- Content organized into modules and lessons
- Quizzes: over 1,220 auto-graded exercises
- Over 200 pre-recorded lecture videos
- User tracking: Grade Book, New Analytics
- Surveys: user feedback and demographics
- Conditional release: users must complete surveys to access content

## Design Challenges

- User tracking on public Canvas sites: developing GT Community and public versions of each course
- Student assistant hiring, training

## Impact

- Using course materials current and future offers of courses
- Learning resources for students across campus and beyond
- Supporting the transition away from publisher materials to free open access
- Used Statistics site for placement test
- Greater awareness of OER
- Curriculum shared to Canvas Commons, OER Repositories
- Student assistant career development

## Funded By

- GT Center for Promoting Inclusion and Equity in the Sciences (C-PIES)
- Howard Hughes Medical Institute Inclusive Excellence Grant

## Project Website



## Enrollment Demographics (Preliminary)

### Current Enrollments

- 120 College Algebra
- 380 Multivariable Calculus
- 11 Statistics

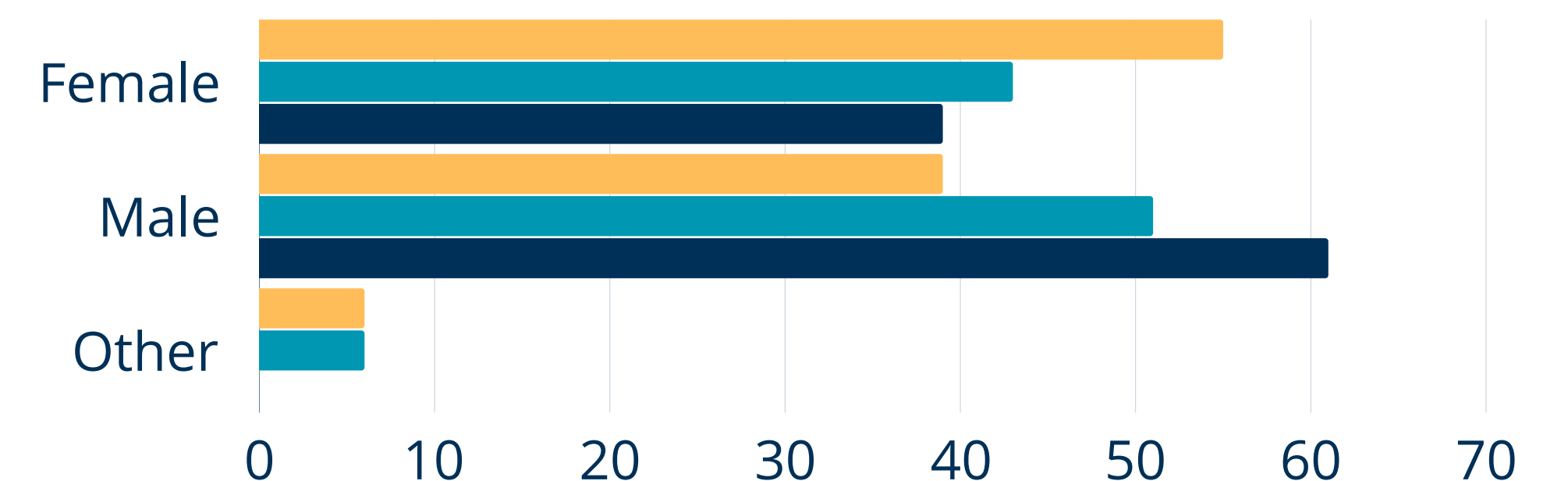
### Enrollment Survey Data

- Enrolled students include First Generation and Transfer students
- High school students enrolling in our open courses (eg for dual enrollment programs)
- Students enrolling in our courses for a variety of motivations, including a preparation for a course they plan to take in the future, and preparation for a placement exam

### Legend

- College Algebra
- Multivariable Calculus
- Institute Undergraduate

### Gender Distribution Among Enrolled Students



### Ethnicity Distribution Among Enrolled Students

