

# Teaching Portfolio

## 1 Teaching Experience

### • Instructor of Record

- **Course Instructor, University of Toronto**
  - \* **CSC 300:** Computer and Society (Winter 2026)
- **Adjunct Professor, University of Colorado Boulder**
  - \* **INFO 4609:** User-Centered Design (Fall 2025: 20 students)
- **Assistant Teaching Professor, University of Colorado Boulder**
  - \* **INFO 2301:** Quantitative Reasoning (Fall 2024: 37 students, Spring 2025: 49 students)
  - \* **INFO 1301:** Statistics for Information Science (Fall 2024: 38 students, Spring 2025: 31 students)
- **Graduate Part-Time Instructor, University of Colorado Boulder**
  - \* **INFO 4609:** User-Centered Design (Spring 2024: 20 students)
  - \* **INFO 1301:** Statistics for Information Science (Spring 2023: 45 students)
- **Lecturer, Dhaka International University**
  - Note: † Odd-numbered courses were lecture sections and even-numbered were lab sections.*
  - \* **CSE 401 & 402†:** Compiler Design (33+49 students)
  - \* **CSE 301 & 302†:** Algorithm Design and Analysis (54 students)
  - \* **CSE 209:** Computer Organization and Architecture (59 students)

### • Teaching Assistant

- **Graduate Teaching Assistant, University of Colorado Boulder**
  - \* **INFO 1111:** Understanding the World Through Data (Fall 2023: 160 students / Studio: 32 students), Instructor: Bryan Semaan
  - \* **INFO 1301:** Statistics for Information Science (Fall 2022: 60 students), Instructor: Lecia Barker
  - \* **INFO 1201:** Computational Reasoning (Fall 2021: 160 students / Recitation: 40; Spring 2022: 140 students / Recitation: 35), Instructor: Jason Zietz
- **Teaching Practicum‡, Syracuse University**
  - Note: ‡ Ph.D. students at Syracuse University developed and redesigned courses and shadowed faculty members as part of the practicum experience.*
  - \* **IST 343:** Data in Society (Spring 2020: 86 students), Instructor: Jennifer Stromer-Galley
  - \* **IST 649:** Human Interaction with Computers (Fall 2019: 8 students), Instructor: Bryan Semaan
  - \* **IST 421:** Information Visualization (Spring 2021), Mentor: Josh Introne
  - \* **IST 300:** Digital Platforms (Fall 2020), Mentor: John Jordan; Collaborator: Ellen Simpson
- **Graduate Assistant, Missouri State University**

- \* **CSC 130:** The World of Computer Science (Spring 2018: 42 students, Spring 2019: 45 students), Instructor: Yang Wang
- \* **CSC 131:** Computational Thinking (Fall 2018: 68 students, Spring 2019: 37 students), Instructors: Jamil Saquer, Sam Bumgardner

## 2 Summary of Sample Syllabi

I have taught three courses as the instructor of record at the University of Colorado Boulder in different terms. Here are the key details about those courses' syllabi (Full syllabi are available here: [https://bit.ly/das\\_syllabi](https://bit.ly/das_syllabi)).

### INFO 1301: Statistics for Information Science

- **Schedule:** Tues. and Thurs., 8:00–9:15 am, In-person, Muenzinger Psyc & Biopsych E064
- **Course Goals:**
  - Understand and organize data types for statistical analysis.
  - Analyze and visualize data using Excel.
  - Interpret and communicate statistical findings responsibly.
- **Weekly Topics:**
  - **Module 1: Data Organization, Quality, Sampling**
    - \* Week 1 – Types of Data, Syllabus Overview
    - \* Week 2 – Data Summaries, Excel Basics
  - **Module 2: Descriptive Statistics and Error**
    - \* Week 3 – Central Tendency, Spread
    - \* Week 4 – Distribution Shape, Outliers
    - \* Week 5 – Measurement Reliability and Validity
    - \* Week 6 – Review and Midterm 1
  - **Module 3: Inferential Statistics**
    - \* Week 7 – Sampling Distributions
    - \* Week 8 – Confidence Intervals, Hypothesis Testing
    - \* Week 9 – Comparing Groups
    - \* Week 10 – Error Types, T-Tests
    - \* Week 11 – Spring Break (No Class)
    - \* Week 12 – Chi-Square, Correlation
    - \* Week 13 – Review and Midterm 2
  - **Module 4: Regression**
    - \* Week 14 – Simple Linear Regression
    - \* Week 15 – Multiple Regression
    - \* Week 16 – Final Review

- **Key Assignments:**
  - Weekly untimed reading quizzes and in-class Excel practices
  - 12 homework sets using Excel functions and visualization
  - Three in-class exams, including a cumulative final
- **Assessment:** Class Practice (10%), Quizzes (10%), Homework (40%), Exams (40%)

### INFO 2301: Quantitative Reasoning

- **Schedule:** Mondays and Wednesdays, 3:35–4:50 pm
- **Delivery:** Synchronous Remote (on Zoom)
- **Course Goals:**
  - Build foundations in logic, combinatorics, probability, and basic data modeling.
  - Apply mathematical reasoning to real-world data problems using Python.
  - Interpret and validate quantitative results.
- **Weekly Topics:**
  - **Module 1: Fundamentals**
    - \* Week 1 – Introduction, Motivation, JupyterHub Setup
    - \* Week 2 – Logic,  $\text{\LaTeX}$ , Python Testing (`unittest`)
    - \* Week 3 – Sets and Functions
    - \* Week 4 – Scalars, Vectors, and Matrices
    - \* Week 5 – Exam 1
  - **Module 2: Probability and Statistics**
    - \* Week 6 – Intro to Probability Distributions
    - \* Week 7 – Conditional Probability
    - \* Week 8 – Expected Value
    - \* Week 9 – Bayes Rule
    - \* Week 10 – Exam 2
  - **Module 3: Combinatorics and Regression**
    - \* Week 11 – Permutations and Combinations
    - \* Week 12 – Binomial Distribution
    - \* Week 13 – Normal Distribution
    - \* Week 14 – Regression and Correlation
    - \* Week 15 – Final Exam Review
- **Key Assignments:**
  - Weekly reading quizzes and module-wise homework assignments
  - Use of Python's `unittest` framework for simulating and solving quantitative problems
  - Three exams, including a cumulative final
- **Assessment:** Quizzes (10%), Homework (30%), Exams (50%: 2 midterms, 1 final)

**INFO 4609: User-Centered Design**

- **Schedule:** Wednesdays, 3:35–6:05 pm, In-person, Lucile Berkeley Buchanan Bldg 341
- **Course Goals:**
  - Survey HCI theories and user-centered design (UCD) methods.
  - Apply design research tools: user studies, prototyping, iterative feedback.
  - Engage critically with the sociopolitical dimensions of design.
- **Weekly Topics:**
  - **Module 1: Foundations**
    - \* Week 1 – Introduction to User-Centered Design
    - \* Week 2 – Human-Centered Design
    - \* Week 3 – Cognition and Context
  - **Module 2: UCD Process**
    - \* Week 4 – Design Paradigms
    - \* Week 5 – User Research Methods I
    - \* Week 6 – Project Planning (Instructor unavailable)
    - \* Week 7 – User Research Methods II
    - \* Week 8 – Analyzing User Needs, Prototyping
    - \* Week 9 – Evaluation I
    - \* Week 10 – Evaluation II
  - **Module 3: Critical UCD**
    - \* Week 12 – Power and Politics in Design
    - \* Week 13 – When and What (Not) to Design
    - \* Week 14 – Challenges and Frontiers in UCD
    - \* Week 15 – Project Work
    - \* Week 16 – Project Showcase
- **Key Assignments:**
  - Weekly reading reflections on core HCI texts
  - Milestone-based semester project involving UCD cycle: user research, ideation, prototyping
  - Final showcase and 4000-word design report
- **Assessment:** Participation (20%), Reflections (40%), Project (40%)

### 3 Teaching Awards and Recognitions

- **Teaching Excellence Award (TEA)** Spring 2024  
Graduate and Professional Student Government (GPSG), University of Colorado Boulder  
Recognized for outstanding teaching contributions based on a formal evaluation rubric assessing student engagement, commitment to growth, and teaching significance. Evaluation emphasized inclusive practices, adaptation based on student feedback, and articulation of teaching philosophy. Official notification was received via email communication in May 2024.

### 4 Pedagogical Training and Workshops

- **Quality Assurance Workshop on Teaching-Learning Methods and Curriculum** 2017  
Institutional Quality Assurance Cell (IQAC), Dhaka International University  
Completed training focused on effective course design, active learning strategies, formative and summative assessments, and continuous improvement practices in teaching.

## 5 Evaluation

### 5.1 Student Feedback

The following selected comments from students in the formal evaluation at the University of Colorado Boulder through the Faculty Course Questionnaire (FCQ), between Fall 2021 and Fall 2024, highlight my teaching strengths in clarity, engagement, and support for student learning.

“Dipto is the best teacher I’ve ever had in my past 3 years here at CU Boulder. He is very aware in general. He can tell when the class doesn’t understand and always is sure to provide plenty of practice examples. He makes himself very available to help his students throughout each week, and does a fantastic job of clarifying mistakes in a way that teaches the student how to critically think, not just giving the student the answer (give a man a fish vs teach a man a fish). ... I cannot express how helpful Dipto has been to my growth as a learner. If I could nominate him for a teaching award, I would do it 100%!”  
(Fall 2024)

“Dipto was my favorite professor this semester. He always comes to class with a smile on his face and has a really infectious, positive energy. His Canvas setup is great, and it is really easy to review notes and complete assignments. ... I like how we have a very structured weekly plan, and the in-class practices on Fridays were great and super helpful!”  
(Spring 2023)

“Dipto Das is very excited about the topic, and I know that when he teaches the course on his own, he will do a fantastic job. He is always willing to work with the students to help them understand a topic further; often, he has his own experience or story to give a good example. Sometimes it is difficult to understand his accent, but he is always willing to repeat himself, and over time, I certainly got used to it. The course is challenging and prepares students well for more advanced statistics and data science courses. There is a lot of material to cover. I feel that I have learned so much about this course and that it has taught me many valuable skills.”  
(Fall 2022)

“Dipto was incredibly kind, and it is obvious that he cares a lot about his recitation. I honestly think I learned more practical skills from the recitation than the lecture portion of this class [taught by a different professor]. Dipto taught me new approaches to the types of problems posed in lecture, and is probably the best programmer I’ve seen so far. If he teaches [INFO] 2201, I will make every effort to be in his recitation section. Amazing TA!” (Spring 2022)

## 5.2 Peer Evaluation

The following comments are drawn from a formal peer observation report of my teaching, conducted by Professor Robin Burke (Department Chair, Information Science, University of Colorado Boulder, February 2023), which was communicated to the Undergraduate Program Committee with me copied on the email.

“Students thought the class was well organized and appreciated the scaffolding built into the course design.”

“Students said that Mr. Das explained things well and the instructions for assignments were very clear, so they always knew what was expected.”

“They also appreciated his quick response to student emails: the word ‘lightning’ was used.”