



UNIVERSITY OF NORTHERN COLORADO

Extended Campus

College of Education & Behavioral Sciences
Department of Technology, Innovation & Pedagogy

TIP 513 Professional Renewal
mindSpark Learning Computer Science Discoveries for 6th-10th Grade Instructors

1 Credit

Technology, Innovation and Pedagogy: The goal of the program in Technology, Innovation, and Pedagogy is to develop educational professionals and classroom teachers that have foundational theoretical knowledge of technology infused pedagogy for transformative teaching and learning.

Dates & Times:

- 2-day training - 8:30am-4:30pm
 - Virtual blended format
 - ½ day virtual live training
 - ½ day independent work
- Continued professional development and resources

Course Description:

This course provides students with curriculum, classroom management, and teaching strategy resources for teaching Computer Science Discoveries to their 6th-10th grade students.

Student Learning Outcomes:

Upon completion of the course, students will be able to:

1. Use the curriculum guide to teach CSD to their students, incorporating pedagogy and best practices.
2. Choose an implementation strategy that fits their specific teaching scenario.
3. Utilize formal and informal assessments to inform their teaching and create next steps for students.
4. Problem solve and support their students as they debug their programs.
5. Address equity issues by providing CS education to all students in their schools.

Texts, Readings, Instructional Resources:

Computer Science Discoveries Curriculum Guide, Implementation Guide, Assessment Guide, Debugging Guide, and additional resources as needed.

Course Requirements:

In order to receive a passing grade, the participant must complete the following course requirements:

1. Attend all 5 days of summer instruction
2. Attend all quarterly workshops (4 days total)
3. Teach the CSD curriculum to students in grades 6-10
4. Support the recruitment and enrollment of a diverse group of students in the course

Grade Distribution & Scale:

Grade Scale:

Grading will be Pass/Fail

Course Schedule:

Day 1 (Day 8 as a continuation of summer workshop):

- Unit 5 - Data and Society
- Differentiating for various learners

Day 2 (Day 9 as a continuation of summer workshop):

- Unit 6 - Physical Computing
- App Lab and Circuit Playground

REQUIRED TEXTS/READINGS

Readings draw from several texts, online articles, and media sources. Reading assignments and materials will be provided via the LMS.

COURSE POLICIES

Attendance and Participation

You are expected to attend all synchronous sessions (if applicable) on time and for the full length of class. Asynchronously, you are expected to stay up to date on what is expected and participate with group members and in discussions or assignments.

Late and Missing Assignments

Submission of ALL assignments is expected to be on time and in the prescribed format and manner and is due by 11:59:59 PM on the designated due date. Exceptions may be arranged by communicating your extenuating circumstance to your instructor prior to the due date.

Written Assignment and Communication Policy

All assignments and written communications in this class (including email and discussion board postings), are expected to conform to University-level writing standards. Your writing should be professional, clear, and when appropriate or required, include proper citations of expert knowledge and media in American Psychological Association (APA) format. Errors in spelling and/or grammar are expected to be rare. Colloquial, informal writing is not appropriate.

Appropriate Use of Electronic Communications

Discussion boards and email communications are an important instructional tool this course. Here are some of the most important rules for this class regarding the use of discussion boards and email:

- Don't say anything in the discussion that you would not say in a face-to-face classroom situation. Use your professional judgment.
- Contributions to discussion board should be for "the good of the group"; email me directly with questions or issues that only apply to you.
- Be polite. Choose your words carefully. Do not use derogatory or sarcastic statements.
- Contribute constructive comments and suggestions.
- "Flaming" – expressing anger, often rudely – has no place in a classroom situation, either in the discussion area or in private email. Students receiving any sort of inappropriate email from other students should forward a copy to the instructor.
- Don't use all capital letters. This is considered to be "shouting," and is therefore rude. Likewise, don't use all lower-case letters. In other words, use professional writing, not "IM" writing.

UNC POLICIES

Disability Resource Center

It is the policy and practice of the University of Northern Colorado to create inclusive learning environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion or to an accurate assessment of your achievement (e.g. time-limited exams, inaccessible web content, use of videos without captions), please communicate this with your professor and contact Disability Resource Center (DRC) to request accommodations. Office: (970) 351-2289, Michener Library L-80.

Sexual Misconduct/Title IX Statement

The University of Northern Colorado prohibits and will not tolerate sexual misconduct or gender-based discrimination of any kind. UNC is legally obligated to investigate sexual misconduct (including, but not limited to sexual assault, sexual harassment, stalking, and intimate partner violence). If you disclose an incident of sexual misconduct to a faculty member, they have an obligation to report it to UNC's Title IX Coordinator. "Disclosure" may include communication in-person, via email/phone/text message, or through in/out of class assignments. If you wish to speak confidentially about an incident of sexual misconduct, please contact the UNC Counseling Center (970-351-2496) or the Assault Survivors Advocacy Program (970-351-4040). If you would like to learn more about sexual misconduct or report an incident, please visit www.unco.edu/sexualmisconduct.

Equity and Inclusion Statement

The University of Northern Colorado embraces the diversity of students, faculty, and staff, honors the inherent dignity of each individual, and welcomes their unique perspectives, behaviors, and worldviews. In this course, people of all races, religions, national origins, sexual orientations, ethnicities, genders and gender identities, cognitive, physical, and behavioral abilities, socioeconomic backgrounds, regions, immigrant statuses, military or veteran statuses, size and/or shapes are strongly encouraged to share their rich array of perspectives and experiences. Course content and campus discussions will heighten your awareness to each other's individual and intersecting identities. The Office of Student Rights & Responsibilities (located in Michener Library) serves as resource to anyone seeking support or with questions about equity and inclusion at the University of Northern Colorado (UNC). If you are a witness to or experience acts of bias at UNC and would like to learn more about bias response or report a bias incident, please visit <https://www.unco.edu/dean-of-students/share-concern-complaint/>.

Academic Integrity Statement

Academic integrity, as with so much in life, involves a system of interconnected rights and responsibilities that reflect our mutual dependence upon one another. The success of individual efforts in school, as with so much in life, depends on each of us conscientiously exercising our rights and living up to our responsibilities. And the failure of any of us—even just one of us—to do what is required will diminish, however slightly, the opportunity for the rest to achieve their goals. That is why it's essential for each of us in this university to practice academic integrity. For practice today will lay a solid foundation for practice tomorrow, and the day after that, and the day after that, so that through daily practice integrity will come to be woven throughout the fabric of our lives, and thus through at least a part of the fabric of society. For more information, visit: <https://www.unco.edu/dean-of-students/offices-resources/student-rights-responsibilities/academic-integrity.aspx>.

Special Term/Short Course

Special Term Courses do not meet during a typical semester (begin or end earlier or later), these courses have different add/drop/withdrawal dates. It is the responsibility of the student to be aware of these dates. Please refer to "special term/short course deadlines" from this link: <http://www.unco.edu/registrar/current-students/course->

[add-drop.aspx](#), to learn the dates for this course. To drop or withdraw, you must contact the Registrar's Office at 970-351-2231.

Billing

The UNC Bursar's office will email a billing notification, and information on how to pay, to your student BearMail. Accounts not paid in full by the due date will be assessed a monthly finance charge.

Requesting Transcripts

There are two options for requesting transcripts. For an unofficial transcript, on your Student tab in URSA, choose "Unofficial transcript" located under the "Grades" heading. For an official transcript, go to <http://www.unco.edu/registrar/etranscripts.aspx>.