

Spring 2023

Intro to Computer Science Education Microcredential

Instructor: Johnny Delgado

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Office hours: By appointment

Office Location: 0502A-Norman Hall (IALT Offices below the Education Library)

Course Fee: Free

Class Location/Schedule: Online

Course Description:

This microcredential course will prepare you to bring computer science into your instruction, regardless of the subject matter — no CS experience necessary. Through this microcredential course, you will be introduced to computational thinking, programming, debugging, computer science pedagogy, and computer science integration.

Objectives:

By the end of this microcredential course, you will:

- Reflect on your personal experiences with computational thinking (CT) and computer science (CS)
- Explain the concepts of computational thinking (CT) and computer science (CS)
- Create programs using block-based code.
- Debug (correct) issues with code.
- Explore existing resources to fit your teaching context.
- Reflect on a CS lesson for a grade level you hope to teach.

Required Textbook:

No textbook required!

Course Assignments:

1. CS Autobiography: You will write an autobiography of your experiences with computer science. You can express yourself using any medium that you like. You may also choose to create your story using a combination of different media. Feel free to include text, pictures, drawings, video, recording, or other media that help you tell your story.
2. About Me Challenge: You will pick one of 3 Block based languages (Scratch, Scratch Jr., or App Lab). Once you have gotten familiar with your language of choice, you will use it to create a story about you, a pet, your hobby, or something of interest to you.
3. Pet Bug Museum: This discussion post is where you can share your coding successes, ask for help from others, and learn from mistakes made by others.
4. Exploring Existing CS Ed Resources: In this assignment, you will take the role of the student and complete a CS lesson/activity that you find most interesting or useful. After experiencing the lesson/resource, you will share some of your thoughts on the lesson/resource in a discussion post.

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5. Review a CS Lesson Plan: In this assignment, you will review a lesson plan and complete a reflection about the lesson. You can find any existing CT or CS lesson plan and share your thoughts on it.
6. CS Autobiography-Revisited: For the final assignment, you will update your CS Autobiography to reflect your current thoughts, feelings, and beliefs about computer science.

TOPIC OVERVIEW

Module Number	TOPICS	Assignments & Due Date
1	Introduction to the Microcredential	Familiarize yourself with the course. Read: Viewpoint: Computational Thinking (Wing, 2006)
2	Intro to Computational Thinking	CS Autobiography
3	Intro to Programming/Pick an Environment	Scratch/Scratch Jr./AppLab About Me Challenge
4	Debugging Your Code	Pet Bug Museum: Online discussion
5	Exploring Existing CS Lesson/Resources	Exploring Existing CS Ed Resources
6	Finishing Up/Reflection	Review a CS Lesson Plan CS Autobiography: Revisited

Final Grades:

Each student’s points on all assignments will be totaled to approximately 500 points and a final grade will be assigned based on UF’s grading policy:

A	B	C	D
93.0 – 100 A	87.0 – 89.99 B+	77.0 – 79.99 C+	67.0 – 69.99 D+
90.0 – 92.99 A-	83.0 – 86.99 B	73.0 – 76.99 C	63.0 – 66.99 D
	80.0 – 82.99 B-	70.0 – 72.99 C-	60.0 – 62.99 D-

For greater detail on the meaning of letter grades and university policies related to them, please see the Registrar’s Grade Policy regulations at <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Course Policies:

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All formal communication, including the submission of assignments and schedule changes are done through Canvas. Students are required to check regularly. Assignments should be presented in a neat and concise manner, following the specific guidelines that are provided for each. The course is broken down by topics into modules with associated learning activities. The learning activities for each module are to be completed during the weeks associated with each module (see the course schedule for specifics).

UF Policies

University Policy on Accommodations:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter that must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

University Policy on Honesty and Academic Misconduct:

UF students are bound by The Honor Pledge, which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Netiquette: Communication Courtesy:

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats.

<http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf>

Online course evaluation process:

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://gatorevals.aa.ufl.edu/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>

Office Hours & Course Communication

Office hours are set up on a case by case basis. Please email or send a message from within Canvas so that we can set up a time to meet or Zoom. General questions can be posted to the Q&A Forum.

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Hints for being successful in this class

1. Be sure you that you have reliable Internet access.
2. Be willing to commit 1-2 hours per week.
3. Keep up; it is easy to ignore online course requirements until it is too late.
4. Schedule time to work on your course(s) in your planner. Be sure this is a time where you can work without interruptions.
5. Take time to get to know your classmates. As it can be in a face-to-face environment, isolation can be a barrier to successful online learning. Use the forums to communicate, to contribute your expertise and to seek assistance.
6. Strive to make assignments meaningful and relevant to your context.
7. Keep in contact with your instructor and contact them immediately when you have questions or comments.
8. Have fun!

Disclaimer:

This syllabus represents current plans and objectives. As we go through the semester, these plans may need to change to enhance the class' learning opportunities. Such changes, communicated clearly, are not unusual and should be expected.