

VR4Ed Coding Program
Course Syllabus – Fall 2020
Dr. Angela Hemingway & Dr. Kaitlin Maguire, STEM Action Center

Course Number:

Course Hours: One (1)

Link to Registration:

Registration Deadline: March 6, 2020

Location and Course Dates:

February 21, 2020 9am-4:30pm

Venue: TBD, Boise, ID

Course Cost: \$60

Instructor Email: Angela.Hemingway@stem.idaho.gov, 208-332-1726; istem@stem.idaho.gov, 208-332-1729

COURSE DESCRIPTION: In collaboration with the Idaho Virtual Reality Council and Blocksmith Inc, this project aims to introduce middle and high school-aged educators and students to coding by creating games or their own virtual worlds. Using Blocksmith's coding software platform, educators will learn how to guide students to create objects, learn concepts, and share and explore worlds created by their peers and to help build a community of learning. Educator teams from a school will attend the professional development training (receiving their own software access) and each educator team will then share the VR hardware. Each educator team will also have access to two 30-minute sessions (one-hour total) of continued support with Blocksmith after the PD training to ensure they are getting the most of their VR program.

COURSE OBJECTIVES:

- 1) Develop and connect next-level computer science pedagogy with interdisciplinary career exploration and practical applications to build equity and self-efficacy among students and educators in Idaho.
- 2) Equip educators with the knowledge and materials to learn and effectively instruct 3D computing programming with Blocksmith's software. VR hardware equipment will be used as a tool to explore the objects, spaces, games, and immersing in what students create with Blocksmith.
- 3) Learn coding instruction (Blocksmith software), utilizing the VR equipment as a tool and increasing awareness for students if they would like to pursue game design. This knowledge will be the base of what students use to build upon if they would like to pursue gaming further.

COURSE ASSIGNMENT:

- 1) Attend the Professional Development Training February 21, 2020 (7.5 hrs)
- 2) Implement program and participate in student project development and showcase with at least one student project (7 hrs)
- 3) Participate in two 30 minutes individual school follow-up call with Blocksmith VR within the semester of implementation (1 hr)
- 4) Submit at least one student project to istem@stem.idaho.gov no later than 5pm MST, October 30, 2020

- 5) Submit a team Final Report via the Community Grant Portal no later than 5pm MST, November 15, 2020. (1 hr)

RESOURCES:

Blocksmith VR website (<https://www.blocksmithxr.com/>) and Facebook page (<https://www.facebook.com/theblocksmith>)

COURSE ASSIGNMENT DUE DATE: November 15, 2020 by midnight MST.

TRANSCRIPT DATE: Fall 2020