

Goals of Service Learning (SL):

1. Improve STEM college readiness for 5th Grade students.
2. Prepare and support 5th grade STEM teachers in Georgia's classroom.
3. STEM majors serve the community while building STEM skills.

Service Learning Course

1. STEM majors teach inquiry-based science labs to 5th graders
2. 3- credit course offered to all majors (juniors and seniors) as elective credit or internship credit for Biology majors.
3. Students work in teams of 2-4 with two 5th grade classes each semester.
4. Implement 10-12 one-hour science labs in a semester.
5. With set up & travel-total 20 hours at school; additional 20 hours at GGC in preparation and reflection.

Impact to date 2012- 2017: 969 5th graders; 55 STEM majors.

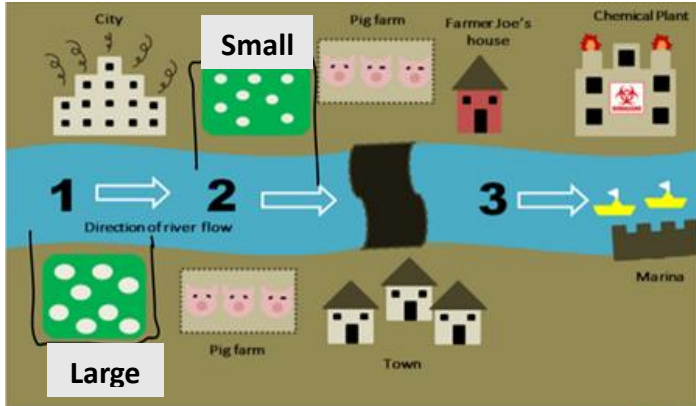
	STEM initiative II	STEM EIP – new model
Professional development workshop for teachers	X	- train teachers to co-teach labs with GGC students - integrate labs into curriculum
Partner with Elementary schools	1 school	3 schools. Train- the- trainer model
GGC STEM majors	- 2-4 per 5 th grade class - taught and implemented labs - role model for 5 th graders	- 2-4 per 5 th grade class - will co-teach with teachers - role model for 5 th graders
GGC faculty	- train GGC students - helped facilitate labs	- train GGC students - will not facilitate labs

Mystery Scenario-based Course Design

1. Problem based learning; 5th graders play role of science sleuths
2. Based on 5th grade science content standards and curriculum maps
3. Labs are hands-on, inquiry- based and are meant to enhance the curriculum.

FALL semester – GRIZZLY RIVER MYSTERY

Standards: Classifying organisms; Cell theory & Genetics; Forces in Earth Science



Farmer Joe's dilemma: Why are onions on one side of the river smaller than those on the other side?

5th graders sampling the river



Students use microscopes to view cells.
Distinguish between animal and plant cells.
Parts of a cell



A stream table is set up to demonstrate concepts such as weathering, erosion and deposition