**EDU 612 – Curriculum, Planning and Organization**

**Unit Overview and Statement of Purpose Template**

**YOUR NAME**:

**SUBJECT:** Science

**COURSE AND GRADE**: 5th

**UNIT TITLE**: Force and Motion: Relationship between force and motion

*[Creative title may be used but subtitle denoting unit topic/instructional focus must be included, i.e. Brother vs. Brother: Civil War]*

**CENTRAL or BIG IDEA**: Understand the relationship between force and motion

**TIME FRAME:** Total instructional time: 3 weeks

Number of days/instructional periods: 12 days

Length of each instructional period: 60 minutes

**STANDARDS**: Mississippi 5th grade science standards

[*List the standards students will be expected to master in this unit. Cite source(s) of the standards. Be sure to include your literacy standard(s).]*

5. FM.1 Understand that it takes energy or forces to change the motion of objects and that force can have various effects on an object for example stop, move change direction and others. Understand forces such as gravity and friction and examine their effect on motions through simple experiments and simple machines such as wheel, lever, pulley, wedge and others.

**DESCRIPTION:**

[*Outline the instructional focus of the selected unit of study as well as the content and skills that will be taught and evaluated.*]

This Unit will cover forces and motion where the students will learn about the interactions of forces and motion. The students will get to describe and identify various types of forces such as friction and gravity and the effect they have on objects. This unit will allow the students to understand how forces work through contact or distance to affect objects for example stop or move objects. Students will conduct simple experiments and use simple machines to examine the effects of forces on objects.

* Define force and motion
* Identify types of forces
* Describe effects of forces on objects
* Develop and use models to describe the effect of different types of forces affects motion of an object
* Examine the effects of variables on forces and motion.

**STATEMENT OF PURPOSE**

Outline multiple compelling reasons for teaching this unit – not the course and not the subject – but rather the specific unit of study you are developing for the curriculum project.

*Each reason should address the students’ question, “Why do I have to learn this?”*

***Cite evidence from selected sources to support each reason.***

*Sources cited may include professional literature (text and articles), information from newspapers, magazines, and/or Internet sites.*

* Students will understand and describe the relationship between force and motion
* Students will identify and define various types of forces
* Students will describe how the various forces affect objects
* Students will use simple machines to demonstrate and describe the effect of force on motion
* Students will analyze, predict and describe how variables affect force and motion of objects.

References

Mississippi fifth-grade science standards. (2021). Retrieved 15 May 2021, from <https://www.ixl.com/standards/mississippi/science/grade-5>