West Virginia University at Parkersburg **Uniform Course Syllabus**

EDUC 305 Instructional Strategies in Science
Credit Hours: 3
Scheduled hours per week
Lecture: 3
Lab: 0
Other: 0
Field Experience: 0

Catalog Course Description: A course designed to facilitate the elementary education major in the teaching of science. The course will investigate the teaching of science through discovery and inquiry.

Pre-requisites: Admission to Teacher Education Program

Co-requisites: None

Course Learning Outcomes (CLO):

1. Students will plan K-6th grade science lessons utilizing state standards. (Assessment:lesson plans)
2. Students will teach K-6th grade science lessons utilizing state standards and a variety of instructional strategies. (Assessment: lesson plans)
3. Students will utilize differentiated instruction techniques during K-6th grade science instruction. (Assessment: lesson plans, written assignments)
4. Students will create a K-6th grade science assessment plan based on instructional objectives. (Assessment: lesson plans, unit plan)
5. Students will identify instructional strategies, including integrating technology, needed to effectively engage students in K-6th science lessons. (Assessment: lesson plans, written assignments, exam)
6. Students will demonstrate content knowledge of K-6th grade science standards. (Assessment: exam)

CLO Assessment methods: Portfolio, Class Assignments, Lesson Plans, Planning Assignment

Topics to be studied

1. Scientific method, observation, and classification
2. Study Physical, life, earth/space sciences and engineering
3. How to do in-class investigations
4. Performing a long-term investigation
5. Developing and making teaching presentations

Relationship of Course to Program Learning Outcomes (PLO) or Institutional Learning Outcomes :
EDUC 305 incorporates all facets of the philosophical framework of Architects of the Future. Planning, Teaching Skills, and Decision Making Skills are all integral parts of the teaching process. Students in the course will plan and demonstrate activities and lessons in the course that address diversity. Interpersonal Skills relate to working together in cooperative teams to complete projects.

Check if approved as : □ Foundational Learning Course □ Reinforcement Learning Course

Special requirements of the course:

1. Students will be required to perform and report the

results of a long-term scientific investigation to the class.
2. Students will deliver two short in-class presentations to the students in class.
3. Students will be required to teach one module of a science lesson to a group of elementary school students.
4. The instructor will need to complete the Planning Assessment Rubrics in LiveText based on a collection of four lesson plans covering Physical, life, earth/space sciences and engineering utilizing college-and-career readiness standards.
5. Background Check
6. Have current Livetext (or affiliate) subscription and use Blackboard for course requirements.

Additional information:
NA

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