

# **COURSE SYLLABUS**

## BIO 204 Life Science for Elementary School Teachers

### CREDIT HOURS: 4 CONTACT HOURS: 60

#### COURSE DESCRIPTION:

Lecture and laboratory course dealing with life science concepts and the variety of strategies used to teach these concepts in elementary schools. Current State of Michigan life science teaching objectives and associated learning activities will be emphasized. In addition, students will develop a life science lesson and teach it to children in an elementary (K-8) school.

#### PREREQUISITE: ED 110, Program Admission

#### **EXPECTED COMPETENCIES:**

Upon successful completion of this course, the student will be able to:

- Students will be able to describe the policies, issues, and trends in the field of elementary science education.
- Analyze and identify major historical events in education and its impact with current educational trends.
- Identify the psychological, cognitive, emotional, and physical characteristics of typically developing children, children with disabilities, and children who are culturally and linguistically diverse.
- Demonstrate knowledge of and critically evaluate current instructional practices in elementary education to compare and contrast instructional strategies based on students' learning styles.
- Design and implement individual development learning plans that include cognitive processes associated with critical thinking, creative thinking, problem solving, invention, memorization and recall that are appropriate for all students across the learning continuum.
- Identify and explain the models of classroom and behavior management.
- Demonstrate excellent written, verbal, critical thinking, and problem solving skills, which will allow them to effectively make connections between prior knowledge/experience and new learning.
- Interrelationships of pure and applied sciences, and technology.
- Applications of science to local and regional problems and the relationship of science to one's personal health, well-being, and safety.
- Historical development and perspectives on science including contributions of underrepresented groups and the evolution of major ideas and theories.
- Applications of science to the investigation of individual and community problems.
- Use of technological tools in science, including calculators and computers.
- Applications of basic statistics and statistical interpretation to the analysis of data.

#### **ASSESSMENT METHODS:**

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

#### GRADING SCALE:

90%-100% = A 80%-89.9%= B 70%-79.9%= C 60%-69.9%= D <60% = E