

Department of Education INTEGRATED SCIENCE TEACHER EDUCATION

Program Outline

For Students Entering 2021-2022 Academic Year

Degree Earned: Bachelor of Science in Education (BSEd) License Earned: Integrated Science, 132010 OAE Exams: 003 Assessment of Professional Knowledge: Adolescence to Young Adult (7-12); 024 Integrated Science GPA Requirements for Graduation: 2.800 Cumulative, 2.800 in EDU Courses, 2.600 in required courses for Integrated Science Name _____ ID# _____ Advisor _____ Courses marked with # fulfill the BIO minor requirements. BIO minor requires 17 credits which must include BIO 121, BIO 122. Course # **Course Title** Hours **Advising Notes** (Note: Unless otherwise noted, course is offered in Fall and Spring) **Required Courses in Astronomy** AST 121 Astronomy of the Solar System 3 AST 170 **Observational Astronomy Lab** 1 Prerequisite or Corequisite: AST 111 or AST 121 or Equivalent **Required Courses in Biology:** Principles of Biology I BIO 121# 4 BIO 122# Principles of Biology II 4 BIO 211# 4 Genetics Offered Fall Only Prerequisites: "C-" or better in BIO 121 and BIO 122 BIO 263# Sophomore Biology Seminar 1 Prerequisites: "C-" or better in BIO 121 and BIO 122 ENV 305# Biogeochemistry 4 Contact BIO Dept. for next Prereguisites: BIO 121, BIO 122, CHM 111, CHM 112, CHM 115 offering **Required Courses in Chemistry:** General Chemistry I CHM 111 4 4 CHM 112 General Chemistry II Prerequisite: CHM 111 General Chemistry Laboratory 1 CHM 115 Prerequisite: CHM 111; Corequisite: CHM 112 CHM 251 Organic Chemistry I 4 Offered Fall Only Prerequisite: CHM 112 and CHM 115; Corequisite: CHM 255 CHM 255 Organic Chemistry I Laboratory 0.5 Offered Fall Minimester B Only Prerequisite: Corequisite: CHM 251 **Required Courses in Geology: GEO 111** The Dynamic Earth 4 **Required Courses in Physics:** General Physics I PHY 131 4 Offered Fall Only Must be taken concurrently with PHY 151 unless given permission of instructor Prerequisites: The student is assumed to have had high school mathematics through algebra and pre-calculus Corequisites: High school physics and familiarity with calculus, or calculus should be taken concurrently

PHY 132	General Physics II Must be taken concurrently with PHY 152 unless given permission of instructor Prerequisites: The student is assumed to have had high school mathematics through algebra and pre-calculus Corequisites: High school physics and familiarity with calculus, or calculus should be taken concurrently	4	Offered Spring Only
PHY 151	Introductory Physics Lab I Must be taken concurrently with PHY 131 unless given permission of instructor	1	Offered Fall Only
PHY 152	Introductory Physics Lab II Must be taken concurrently with PHY 132 unless given permission of instructor	1	Offered Spring Only