SCIENCE (SCI)

SCI 101 The Nature of Science (3 Credits)
45 lecture, 3 total contact hours
In this course, students will learn the importance of the natural and physical sciences to everyday life. The emphasis is on science as a way to evaluate the validity of scientific information in the media and on the Internet. The goal is for students to apply the basic laws, concepts, and themes that underlie our natural world in order to place important public issues such as the environment, energy and medical advances in a scientific risk assessment and risk management context. Level I Prerequisite: Academic Reading and Writing Levels of 6

SCI 102 Applied Science (3 Credits)
45 lecture, 15 lab, 3 total contact hours
In this course, students will identify the principles of basic science and physics as they apply to the handling, installation, and repair of mechanical equipment in the piping industry. Students will study the concepts, properties, and characteristics of fluids (including water, hydraulics, pneumatics, metals and alloys) and corrosion through classroom problem-solving calculations and lab activities. Using mathematical computations to determine volumes, change of state, and the effects of temperatures and pressures will also be discussed. In addition, students will recognize the relationships of these sciences to understand the mechanical advantages of simple and compound machines as well as the benefits gained through measured work and horsepower. This course is open only to apprentices in the United Association. Level I Prerequisite: Academic Reading and Writing Levels of 6; Member of the United Association