**DIVE 1010 Orientation, Safety, and Industry Terminology (1-0-0)**

**DIVE 1020 DIVING PHYSICS (2-0-2)**

The physics of gas and water pressure applicable to diving. Covers normal air, water, partial pressure, atmospheric pressure, gauge pressure, absolute pressure, buoyancy, Archimedes' Principle, Boyle's Law, Charles' Law, Gay-Lussac's Law, Henry's Law, the General Gas Law, and definitions of buoyancy, density, area, and volume. Provides application of physics formulas including gauge and absolute pressure at various depths, volume of cylinders, air supplies required by divers, required capacity of air compressors, and hose test formula, and helmet flow requirements.
**Prerequisites: High School or GED**

**DIVE 1030 DIVING PHYSIOLOGY (1-0-1)**

The study of various organs and parts of the living body, their functions and activities. Includes anatomy and physiology of the circulatory and respiratory systems, body cavities containing air, effects of pressure applied to the body, narcotic and toxic effects of gases, and inert gas absorption and elimination, and principles involving prevention of decompression sickness.
**Prerequisites: DIVE 1020**

**DIVE 1040 AIR DECOMPRESSION (2-0-2)**

Decompression beginning with history and definition. Covers U.S. Navy tables and procedures, no-decompression dives, repetitive groups, Standard Air Table, Surface Oxygen Table, Surface Air Table, exceptional exposures, and altitude diving tables and computations. Provides practical application of tables in theoretical dives. Students keep track of each other's decompression during dives.
**Prerequisites: DIVE 1030**

**DIVE 1050 DIVE MEDICINE (0-1-1)**

Covers the symptoms and causes of the various diseases and injuries that occur in diving. Provide information on the various psychological aspects of diving. Includes selection and use of tables for treatment of decompression sickness and air embolism, field neurologic examinations of diving casualty, and first aid and CPR.
**Prerequisites: DIVE 1030**

**DIVE 1060 CHAMBER OPERATIONS (0-1-1)**

Provides theory of operation, nomenclature, and precautions in the use of recompression chambers. Includes operation of the chamber simulating decompression operations and treatment.
**Concurrent: DIVE 1040, DIVE 1050**

**DIVE 1070 SEAMANSHIP AND RIGGING (1-0-1)**

This course provides awareness of applicable sections of API RP2D as well as the construction, use, and care of fiber and wire rope, splices in fiber and wire rope, use of terminal fittings on wire rope, rigging of block and tackle, and knot tying. Also covers the application of seamanship and rigging.
**Prerequisites: High School or GED**

**DIVE 1080 LOGS, RECORDS, AND STANDARDS (1-0-1)**

An overview of the U.S. Coast Guard, OSHA, Army Corps of Engineers, and ADCI Consensus Standards. Includes instruction on the types and uses of dive logs, records, and reports.
**Prerequisites: High School or GED**

**DIVE 1090 ENVIRONMENTAL HAZARDS (1-0-1)**

A course covering environmental hazards that the diver may encounter, diving procedures, and safety precautions when diving in a contaminated environment, and noxious gases that may be encountered in diving operations.
**Prerequisites: High School or GED**

**DIVE 1100 DIVING EQUIPMENT (0-1-1)**

The nomenclature, function, and operation of lightweight diving equipment, masks, and helmets; including procedures for checking, testing, and maintaining lightweight diving equipment. Includes making, maintaining, and testing of diver's umbilical and use of hot water system.
**Prerequisites: High School or GED**
**Concurrent: DIVE 1131**

**DIVE 1111 MARINE ENGINES AND COMPRESSORS LAB (1-0-1)**

Provides a fundamental knowledge of the operation, maintenance, and field troubleshooting of diesel engines and low-pressure compressors.
**Prerequisites: DIVE 1020**

**DIVE 1121 TOPSIDE WELDING AND OXY-ACETYLENE CUTTING LAB (0-1-1)**

**DIVE 1131 UNDERWATER WORK LAB (0-1-1)**

This course provides experience in the use of lightweight diving equipment, procedures, and safety considerations while gaining practical experience in some underwater tasks. The course provides classroom instruction in nomenclature, theory, technique, and safety considerations of accomplishing work using various tools and equipment as well as practical water experience.
**Prerequisites: DIVE 1020, DIVE 1030, DIVE 1040, DIVE 1050, DIVE 1111**
**Concurrent: DIVE 1100**

**DIVE 1141 UNDERWATER CUTTING AND WELDING LAB (0-1-1)**

Covers the equipment used in oxy-arc cutting, techniques for underwater oxy-arc cutting, equipment used in underwater welding, techniques for underwater welding, and safety precautions for each.
**Prerequisites: DIVE 1020, DIVE 1030, DIVE 1040, DIVE 1050, DIVE 1111, DIVE 1121**
**Concurrent: DIVE 1100**

**DIVE1150 MIXED GAS DIVING**

Fundamentals of mixed gas diving techniques and procedures. Includes the history and medical aspects of mixed gas diving, formulas, decompression procedures, diving and emergency procedures, operator safety considerations, and treatments. Utilizes classroom application through hypothetical situations.
**Prerequisites: DIVE 1020, DIVE 1030, DIVE 1040, DIVE 1050**

**DIVE1180 Operations Planning & Industrial Offshore Safety (1-0-1)**

**JOBS 2450 JOB SEEKING SKILLS (2-0-2)**

This course is required of all Technical Diploma and Associate Degree students and should be taken during their last semester of enrollment prior to completion of diploma/degree requirements. This course assists students in making immediate and future decisions concerning job choices and educational growth by compiling résumés, evaluating job offers, and outlining information essential to finding, applying for, and terminating a job.
**Prerequisites: Successful completion of 15 Hours in a major program.**