# DIVE - DIVING TECH AND METHODS (DIVE)

#### **DIVE 250 SCUBA Diving I**

**Credits 4. 3 Lecture Hours. 3 Lab Hours.** Fundamental academic knowledge and practical application of SCUBA diving practices and theory; introduction to diving tables and diving physiology. **Prerequisite:** Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination.

## DIVE 251 SCUBA Diving II

**Credits 3. 2 Lecture Hours. 2 Lab Hours.** Methods to promote safe, self-reliant diving and improve the diver's comfort, coordination and strength in the water; to build competency in dive planning and organization. **Prerequisite:** Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination; open water certification from a nationally recognized agency; Divers Alert Network (DAN) insurance or equivalent.

# DIVE 260 Scuba Diving III

**Credits 4. 3 Lecture Hours. 3 Lab Hours.** Methods to promote safe, selfreliant diving and improve the diver's comfort, coordination and strength in the water; build competency in dive planning and organization; practice accident prevention and effective accident management. **Prerequisites:** Must complete a medical statement showing no contraindication to diving or have a recreational scuba diver's physical examination; open water certification from a nationally recognized training agency; Diver's Alert Network (DAN) diving accident insurance or equivalent.

# DIVE 310 Techniques in Boat and Wreck Diving

**Credits 3. 2 Lecture Hours. 2 Lab Hours. 0 Other Hours.** Overview of different types of boat diving and the skills needed to plan and conduct boat dives safely; discussion of the equipment and techniques commonly employed while performing external survey of and limited penetration of wrecks. **Prerequisites:** Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination; Advanced Open Water certification from a nationally recognized training agency, and must have completed a deep diver specialty certification or be able to provide proof of experience in order to dive deeper than 60 feet in this course, or approval of instructor; Enriched Air Nitrox certification; Divers Alert Network (DAN) diving accident insurance or equivalent for course duration; junior or senior classification.

#### **DIVE 330 Rescue Diving**

**Credits 3. 2 Lecture Hours. 2 Lab Hours.** Relates skills necessary to perform basic life support, administer dive first aid, evacuate victim, assist and rescue other divers in water; illustrate proper dive planning; practice accident prevention and effective accident management. **Prerequisites:** Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination; certification as a SDI SCUBA diver or equivalent; Divers Alert Network (DAN) diving accident insurance or equivalent.

## **DIVE 331 Alternative Diving Technology**

**Credits 3. 2 Lecture Hours. 2 Lab Hours.** Illustrates the realities of operating in the scientific, public safety and military diving disciplines; practice real world training scenarios involving multiple aspects of each of the three fields. **Prerequisites:** Must complete a medical statement showing no contraindications to diving, or have a recreational SCUBA diver's physical examination (or AAUS physical if rating with AAUS); certification as an Advanced and Rescue Diver or equivalent; Divers Alert Network (DAN) diving accident insurance or equivalent; junior or senior classification or approval of instructor.

#### DIVE 357 Dive Leadership – Divemaster

**Credits 4. 3 Lecture Hours. 3 Lab Hours.** Examines divemaster level dive knowledge, dive leadership theory and application, presentation and instructional skills, physical diving skills, logistics and planning, risk management and emergency response, and operational execution; develops a multi-environment capable diving leader. **Prerequisites:** Minimum of 18 years of age; current certification in CPR, AED, First Aid for Dive Professionals or Equivalent; current certification in Oxygen Provider or equivalent; a minimum of verifiable 40 logged open water scuba dives to begin the course and 60 by the end of the course, dives shall be varied in environment, depth, and activities; verification of good physical condition as documented by a medical examination and unconditional approval in the last 12 months; water skills and ability equivalent to that of a divemaster; must hold certifications as a Rescue Diver, Advanced Open Water Diver and Nitrox diver; junior or senior classification or approval of instructor.

#### **DIVE 405 Expedition Planning**

**Credits 2. 2 Lecture Hours.** Overview of the background knowledge to successfully plan, coordinate and execute diving-based research expeditions; topics include dive planning, travel logistics, health and safety requirements, and research parameter development. **Prerequisites:** Certification as an Advanced Diver or equivalent; junior or senior classification; or approval of instructor.

## **DIVE 410 AAUS Scientific Diving**

**Credits 4. 3 Lecture Hours. 3 Lab Hours.** Information and training necessary to qualify as Scientific Divers under the auspices of American Academy of Underwater Sciences and the Scientific Diving Program; implementation of project design, advanced study of diving physics and physiology, diving risk management and risk mitigation. **Prerequisites:** Must have a current Science Diving physical examination; Master Level Diver's Alert Network (DAN) diving accident insurance or equivalent; open water, advanced open water certifications and Nitrox, or approval of instructor; current certification in First Aid, AED, CPR and Emergency Oxygen Administration; Scientific Diving Swim Test.

#### **DIVE 411 Offshore Research Diving**

**Credits 4. 3 Lecture Hours. 4 Lab Hours.** Application of research methods and techniques to collect data using scuba diving; opportunities to dive with non-Texas A&M-Galveston dive programs, increase depth ratings under American Academy of Underwater Sciences and Texas A&M-Galveston auspices and to conduct safe, efficient dives to collect and record data underwater. **Prerequisites:** DIVE 410 or approval of instructor; must hold nitrox certification, must be active Scientific Divers under Texas A&M University Galveston auspices; current and complete Texas A&M University Galveston Science Diving physical examination on file; minimum of 12 logged dives in the previous 12 months; current certification in First Aid, AED, O2 Administration and CPR, including hands-on skill evaluations, prior to any open-water work; Master Level or higher Divers Alert Network (DAN) diving accident insurance or equivalent; see the Texas A&M University Galveston Diving Manual for additional specifications.

#### DIVE 430 Techniques in Overhead Environment Diving

**Credits 4. 3 Lecture Hours. 3 Lab Hours.** Instruction in overhead environment diving, technical diving skills, technical diving configurations, dive risk assessment; emphasis on building competency in dive planning, techniques and execution. **Prerequisites:** DIVE 410 or proof of equivalent experience with approval of instructor; must complete a medical statement showing no contraindication to diving or have a recreational scuba diver's physical examination; open water certification from a nationally recognized training agency; Master level or higher or equivalent Diver's Alert Network (DAN) diving accident insurance; 25 logged dives; SDI Deep Diver or equivalent certification or proof of equivalent experience with approval of instructor.

#### DIVE 440 Decompression and Mixed Gas Procedures

**Credits 3. 2 Lecture Hours. 3 Lab Hours.** Extension of allowable dive time and depth through staged decompression; examination of the theory, methods, and procedures for planning and executing staged decompression dives utilizing helium in the breathing mixture to reduce the effects of inert gas narcosis and using decompression breathing gases containing up to 100 percent oxygen. **Prerequisites:** Must complete a scuba training agency medical evaluation form showing no contradictions to diving, or complete a scuba training agency medical evaluation and physician approval form indicating that a physician has advised and approved a student to participate in the activity of scuba diving; certification as an Advanced Diver with Deep specialty or TDI Intro to Tech Diver; DIVE 410 strongly recommended; proof of 50 logged dives; Divers Alert Network (DAN) diving accident insurance (Master Level) or equivalent; junior or senior classification; or approval of instructor.

#### DIVE 489 Special Topics In...

**Credits 0 to 4. 0 to 4 Other Hours.** Selected topics in an identified area of diving technology and methods. **Prerequisite:** Junior or senior classification or approval of instructor.

#### **DIVE 491 Research**

**Credits 0 to 4. 0 to 4 Other Hours.** Research conducted under the direction of faculty member in the Dive program. May be taken three times for credit. **Prerequisites:** Junior or senior classification and approval of instructor.