

GEORGE MASON UNIVERSITY: College of Education and Human Development  
School of Recreation, Health, and Tourism

RECR 161 – 201 001—SCUBA Diving: Basic Diving (2)  
Fall 2016 Wed 7:20-10:00pm 8/29-12/20  
Location: Aquatic and Fitness Center

**Faculty:**

Name: Greg Justice  
Office Hours: M-W 1:00-4:00pm  
Office Location: ENT 433  
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**Prerequisites** None

**Course Description**

Provides training toward certification as an open water SCUBA diver. Emphasizes snorkeling (free diving introduction) and SCUBA skills. Covers safe diving skills, the physics of diving, equipment care and maintenance, diving fitness, underwater navigation, record keeping, and other basic SCUBA knowledge. With successful completion of the course, qualifies students for open water certification by Scuba Schools International (SSI).

**Course Delivery Method** Lecture/Lab

**Learner Objectives**

At the conclusion of the course students will be able to:

1. Explain physical gas laws associated with pressurized gases used in diving.
2. Describe the physiology of diving, emphasizing but not limited to nitrogen and oxygen under pressure.
3. Apply knowledge learned for safe recreational scuba dives.
4. Explain basic first aid and long-term treatment for recreational diving illness.
5. Use SCUBA skills and scientific knowledge for pursuit of Scientific Diver certification.
6. Explain concepts about the aquatic environment including an introduction to El Nino and reef ecology.

**Required Texts**

You will purchase the SSI Open Water Diver Manual and logbook with Dive Tables (student packet). This packet is available at the Field Studies office Ent. Hall Rm 433 at a cost of \$45. Payable by cash or check, please make check payable to "George Mason University". Student packets will not be brought into the classroom for sale you must come to the Field Studies Office.

**Required Equipment and Fees**

SCUBA diving is an equipment intensive sport. The equipment we will use is designed for life-support; there will be no compromise in this respect. Safety, above all will be emphasized, both with regard to equipment and training. Students with injuries or pre-existing conditions that may affect performance must inform the instructor prior to the start of the course and obtain a Physicians release to participate.

Students are required to have their own SCUBA quality mask, fins, booties, snorkel, mouthpiece and weight belt. Variations in this equipment will be discussed during the first night of class. Some students also elect to purchase a lightweight wetsuit. You are required to have this equipment by the second week of class. Fees for the semester are as follows: \$195.00 (Equipment) \$45.00 (Student packet + logbook) are required at the beginning of the semester. Open Water Certification dives certification by Scuba Schools International (SSI). Participation in and completion of the course is required to obtain your open water certification however does not grant or guarantee your certification. We would like you to become an active SCUBA diver upon completion of the course and will offer opportunities for you to complete the open water dives to receive your certification

Equipment fees will be paid directly to Woodbridge SCUBA for equipment and are due the first night of class. The text and related items will be purchased through the Center for Field Studies (Rm 433 Enterprise Hall). Please contact Greg Justice for more information.

**Evaluation**

**Grades:** The quality of your work, your professional approach and contribution to the learning environment, and your performance in skill development will contribute to the final grade in this course.

The course is graded on the following criteria: You will learn basic skills necessary for introductory level, open water snorkeling and diving. Demonstration of these skills is necessary for safe diving and you will be required to perform them competently before passing the course. Four levels of skill development are available. Scoring at level 4 is failure of the skill. If you pass all skills in Level 3, you have met the minimum requirements and a ‘C’ for this component of the course. Passing skills in Level 2 qualify you for a ‘B’, and passing skills in Level 1 qualify you for an ‘A’ on this component of the course. You may work toward the skill level you desire.

The grade scoring is as follows:

each level 1 score = 6.0 points (if all skills are scored at this level, possible score of 108) each level 2 score = 4.5 points (if all skills are scored at this level, possible score of 81) each level 3 score = 4.0 points (if all skills are scored at this level, possible score of 72) each level 4 score = 3.0 points (if all skills are scored at this level, possible score of 54)

Demonstration of snorkel and SCUBA skills	40%
Homework assignments	20%
Written final examinations (SSI and course)	20%
SSI Open Water manual homework assignments	10%
Quizzes administered without notice	10%

**Final Examination** Your final will consist of two parts: 1) the standard SSI final written exam, given prior to the end of classes and; 2) a written exam based on all course materials will be given on the class final exam date. Questions will be multiple choices (SSI) and short answers (Final).

**GRADING SCALE (%)**

A = 94 – 100	B+ = 88 – 89	C+ = 78 – 79	D = 60 – 69
A- = 90 – 93	B = 84 – 87	C = 74 – 77	F = 0 – 59
	B- = 80 – 83	C- = 70 – 73	

**Participation**

Recreational SCUBA diving is an enjoyable sport with individual and team responsibilities. To become a safe diver, you must act responsibly and professionally with regard to your personal actions. Awareness of your environment and development of responsible group working skills contributes to the safety and enjoyment of this sport. This component of the course will be reflected in your ability to follow instructions, demonstrate awareness of your environment to help maintain a safe training environment, and to work with others to contribute to the overall success and enjoyment of the course. This is an important component of demonstration of snorkel and SCUBA skills.

**Professional Dispositions** Students are expected to exhibit professional behaviors and dispositions at all times.

**Core Values Commitment**

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles:

<http://cehd.gmu.edu/values/>.

**GMU Policies and Resources for Students**

*Policies*

- Students must adhere to the guidelines of the University Honor Code (see <http://oai.gmu.edu/the-mason-honor-code/>).
- Students must follow the university policy for Responsible Use of Computing (see

<http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).

- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <http://ods.gmu.edu/>).
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor. *Campus Resources*
- Support for submission of assignments to Tk20 should be directed to [tk20help@gmu.edu](mailto:tk20help@gmu.edu) or <https://cehd.gmu.edu/api/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://courseessupport.gmu.edu/>.
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing (see <http://writingcenter.gmu.edu/>).
- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance (see <http://caps.gmu.edu/>). Template Revision Date: August 2016 3
- The George Mason University Office of Student Support staff helps students negotiate life situations by connecting them with appropriate campus and off-campus resources. Students in need of these services may contact the office by phone (703-993-5376). Concerned students, faculty and staff may also make a referral to express concern for the safety or well-being of a Mason student or the community by going to <http://studentsupport.gmu.edu/>, and the OSS staff will follow up with the student.

**For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/>.**

### **Tentative Course Schedule**

(Course schedule is subject to change at the discretion of the instructor, with notification to the students)

We will be in the classroom and water every night after the first class session. We will meet in the classroom at 7:20 – 8:30 pm for the lecture portion of the class the pool session will start at 9pm at poolside. Come with a bathing suit, towel, mask and snorkel, fins, booties, weight belt and mouthpiece and your study kit (text and workbook) and note taking material every week.

**Week 1:** Introductions, overview of course. Sponsoring dive shop visit (Woodbridge Scuba 4365 Dale Blvd. Woodbridge, VA 22193 PH703-878-4365). You will be introduced to equipment and may purchase your required SCUBA quality snorkeling equipment, weight belt and mouthpiece at this time. You must have your own equipment for class on week 2.

**Pool:** No pool session this week.

**HOMEWORK:** Review all materials in your SSI packet, watch the video, read Chapter 1 and complete the workbook questions for Chapter 1.

**Week 2:** Risk awareness video and forms, permanent training record.

**Pool:** Swim evaluation and snorkeling skills in the pool. Free diving in the pool

**HOMEWORK due:** Chapter 1 workbook questions.

**HOMEWORK assigned:** read Chapter 2 and complete workbook.

**Week 3:** Introduction to SCUBA diving equipment.

**Pool:** SCUBA equipment assembly and use in shallow water. Water skills will include regulator removal and replacement. Mask removal and breathing and Mask clearing.

**HOMEWORK due:** Chapter 2 workbook questions. Turn in work sheets.

**HOMEWORK assigned:** Chapter 3 workbook questions.

**Week 4:** The physics and physiology of diving.

**Pool:** Assembly and use of SCUBA equipment in dive well. Pool skill will include Giant Stride entry Mask Clearing and Regulator Removal & Replacement, Swimming skills, Fin Pivots.

HOMEWORK due: Chapter 3 workbook questions.

HOMEWORK assigned: Chapter 4 workbook questions.

**Week 5:** Changes in pressure, concepts of buoyancy, partial pressure of gasses. Adapting the body to water and pressure. Introduction to dive tables.

**Pool:** Assembly and use of SCUBA equipment in dive well, Review of previous skills and Weight belt removal and replacement.

HOMEWORK due: Chapter 4 workbook questions

HOMEWORK assigned: Homework questions regarding dive tables.

**Week 6:** Depth, time and the diver, adapting the body to changes in ambient pressure and exposure to pressurized air continued. Dive tables.

**Pool:** Assembly and use of SCUBA equipment in dive well. Review of all previous skills, B.C. Removal and Replacement both surface and underwater, Emergency Air Sharing and ascent to surface, Buddy Tows. HOMEWORK due: homework questions on dive tables.

HOMEWORK assigned: Group case study scenarios presented. Practice free diving this week

**Week 7:** Depth, time and the diver continued.

**Pool:** Assembly and use of SCUBA equipment in dive well. Review of previous skills, Air Sharing with Assent to surface, Emergency Swimming Ascent.

HOMEWORK due: Take home problems from last class.

HOMEWORK assigned: Chapter 5 workbook questions.

**Week 8:** Dive environments.

**Pool:** Assembly and use of SCUBA equipment in dive well. Review of previous skills, Emergency Buoyant Ascent.

HOMEWORK due: Chapter 5 workbook. HOMEWORK

assigned: Chapter 6 workbook questions.

**Week 9:** Dive environments continued currents and tides.

**Pool:** Assembly and use of SCUBA equipment in dive well. Review of previous skills, Continued buoyancy skills “Buddha Float” Underwater obstacle course

Skills test and SSI final for those seeking Open Water Certification in Millbrook Quarry HOMEWORK due: Chapter 6 workbook.

HOMEWORK assigned: Homework questions.

**Week 10:** The Bahamas and Coral Reef classes. Opportunities for Dive related activities. **Pool:** Assembly and use of SCUBA equipment in dive well. Review of previous skills, HOMEWORK due: Homework from last class.

HOMEWORK Assigned: Homework questions.

**Week 11:** Review of classroom section of course.

**Pool:** Skills Assessment.

HOMEWORK due: Homework problems from last week.

**Week 12:** SSI final exam. Skills assessment in the pool (to advance to open water)

**Week 13:** Student scenario discussions.

**Pool:** Skills Assessment continued.

**Week 14:** Student Scenarios continued.

**Pool:** Final skills assessment in the pool.