

GEORGE MASON UNIVERSITY
School of Recreation, Health and Tourism Resources

PHED 255: Basic Scuba Diving (2)
Fall 2012

DAY/TIME:	W 7:20-10:00p.m.	LOCATION: AC 112 and Pool
INSTRUCTOR:	Mr. Greg Justice	E-M: gjustice@gmu.edu
	Assistants: Dr. Tom Wood SSI Instructor, Ed Finck SSI Instructor, Bud Haney SSI Instructor	
OFFICE LOCATION:	RM 441 Enterprise Hall	OFFICE HOURS: Mon. – Fri. 1 -3pm
PHONE NUMBER:	(703) 993- 1740	
PREREQUISITES:	None	
COURSE FEE:	Approximately \$235.00 includes course material, equipment rental. Personal equipment costs vary from approx. \$450.00 – \$700.00 depending on the equipment you buy. Does not include open water certification fees.	

COURSE DESCRIPTION

This course will provide training toward certification as Open water SCUBA Diver. The course will emphasize the learning of both snorkeling (free diving introduction) and SCUBA skills. Safe diving skills, the physics of diving, equipment care and maintenance, diving fitness, record keeping and other basic SCUBA knowledge will be covered in the course. Upon successful completion of the course students will be qualified for Open Water certification by Scuba Schools International (SSI) but must complete the required open water certification dives.

COURSE OBJECTIVES

At the conclusion of the course students will:

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. Define the parameters of a safe recreational scuba diver.
4. Implement basic first aid and long-term treatment for recreational diving illness.
5. Complete SCUBA skills and requirements for pursuit of Scientific Diver certification.

REQUIRED READINGS / MATERIALS

1. Dive training packet including:
 - a. Concept Systems (2009), *SSI Open Water Diver*, Fort Collins, Colorado, Scuba Schools International.
 - b. Concept Systems (2009), *SSI Open Water Diver Video*, Fort Collins, Colorado, Scuba Schools International
2. Openwater Logbook

COURSE INFORMATION

1. Students **MUST** have a GMU e-mail account.
2. Faculty Assisting Mr. Justice:

GRADING

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:

Demonstration of snorkel and SCUBA skills	40%
Scenario problem solving presentation and written evaluation	20%
Written final examinations (SSI and course)	20%
Homework assignments	10%
Quizzes administered without notice	10%

A	95-100
A-	90-94
B+	87-89
B	82-86
B-	80-81
C+	77-79
C	70-76
D	65-69
F	64 and below

Demonstration of Snorkel and SCUBA Skills:

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. Three levels of skill development are available. If you pass all skills in Level 3, you have met the SSI 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. Please see the attached Skill Sheet that is supplemental to the syllabus. 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)

Participation/Professionalism:

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.

Final Examination: Your final will consist of two parts:

- 1) The standard SSI final written exam, and
- 2) A written exam based on all course materials will be given on the class final exam date.

REQUIREMENTS

1. **Equipment:**

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 preexisting 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 with at least 6 lbs. of weight. 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.

2. **Fees:**

Fees for the semester are as follows:

\$175.00 (Equipment)

\$60.00 (Student packet + logbook) are required at the beginning of the semester.

Students are required to have their own SCUBA quality Mask, Fins, Snorkel, Booties, Weight belt and a mouthpiece. Some students may elect to purchase a wetsuit as well.

GRADING SCALE

95-100	A
90-94	A-
87-89	B+
82-86	B
80-81	B-
77-79	C+
70-76	C
65-69	D
<65	F

COURSE OUTLINE

We will be in the classroom and water every night after the first class session. We will meet in the classroom at 7:20 – 8:40 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 *Meet at the Aquatic Center Room 112.*

Introductions, overview of course. Sponsoring dive shop visit (Woodbridge SCUBA 4365 Dale Blvd. Woodbridge, VA 2193 Ph 703-878-4365). 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. *You will be required to pay your \$175.00 equipment fee at this time.*

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.

NOTE: The week of Sept. 3rd is Labor Day holiday and no classes are scheduled.

Week 2: October 10th

Risk awareness video and forms, permanent training record.

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

HOMEWORK due: Chapter 1 workbook questions.

HOMEWORK assigned: read Chapter 2 and complete workbook, review video.

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, review video.

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, review video.

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, review video

Week 6: Tuesday October 9th

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 Currents and Tides.

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 “Hazardous Marine Life”.

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.

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.

HOMEWORK assigned: Work on group case study scenarios.

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

Week 13: Student scenario discussions.

Pool: Skills Assessment continued.

HOMEWORK due: Group case study scenarios.

Week 14: Student Scenarios continued.

Pool: Final skills assessment in the pool.

GMU Final: December 17th, 7:20pm AC 112 (no pool session)



Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- Students are responsible for the content of university communications sent to their George Mason University 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 must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

Campus Resources

- 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/>].
- 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/>].

For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <http://rht.gmu.edu>].

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.

This course is designed to improve health and wellness and quality of life. It is part of an increasing number of activities available through the Department of Health Fitness and Recreation resources. For further information about other courses or degree programs, please contact the department at 993-2096.

