



Savitribai Phule Pune University

(formerly University of Pune)

Department of Sports and Physical Education

Under the

Faculty of Inter-disciplinary Studies

Foundation Course in

Outdoor Rescue and Disaster Management

(F.C.O.R. & D.M.)

Credit System

(2024 – 2025)

National Education Policy (NEP) 2020

Foundation Course in Outdoor Rescue and Disaster Management

GENERAL OBJECTIVES OF THE COURSE:-

- To develop a confident society which will be skilled in Rescue -Relief works and is armed with practical training of Disaster Management
- To create awareness about safe adventure and to strengthen the adversity quotient of the society to make them able to tackle crisis effectively.
- To introduce potential employable opportunities in Maharashtra, India, and abroad in the adventure sector through vocational skills, certificate, & degree programme syllabi
- To incorporate experiential education through outdoor sports as per the 'New Education Policy 2020' by MHRD, Gov. of India.

DURATION OF THE COURSE:-

The duration of the course shall be of Three months (270 hours).

Each working Day shall consist of Three hours of theory and practical work

ELIGIBILITY FOR ADMISSION:-

- ❖ Minimum XII Std. or equivalent examination passed from Govt. Board
- ❖ **Age Limit :-** 18 to 45 Years (Both inclusive)
- ❖ **Intake Capacity :-** 40 Students
- ❖ **Fitness Eligibility:-** Good fitness with no limitations for physical activities and exercises.
- ❖ **Medical Test:-** Candidates should be medically fit and sound provided other conditions of admissions are fulfilled.

Note: Expenses such as Travel, Accommodation for examinations/admission process, Travel cost for practical training or any other cost over the tuition fees will be at actual. It will be decided at the beginning of the course as per location, season, and logistical requirements.

MEDIUM OF INSTRUCTION AND EXAMINATION:-

Medium of instruction will be in Marathi and /or English and question papers shall be set in English.

ELIGIBILITY FOR APPEARING AT FOUNDATION COURSE IN OUTDOOR RESCUE AND DISASTER MANAGEMENT EXAMINATION: -

Student should have at least 75% Attendance during the Course. He / She should complete all the practical and other related work expected in all parts of the syllabus. A student who misses more than 25% of the scheduled classes will not be allowed to appear for the exam.

GENERAL INSTRUCTIONS :-

- The **Foundation Course in Outdoor Rescue and Disaster Management (F. C. O. R. & D. M.)** consists of **12 credits**.
- Details of the theoretical and practical components are given in the structure of the program.
- Internal evaluation will follow Continuous Comprehensive Evaluation procedures. Internal evaluation should be done on every credit of each course or minimum two per course as decided by the teacher concerned.

RULES & REGULATIONS:-

The **Foundation Course in Outdoor Rescue and Disaster Management (F. C. O. R. & D. M.)** will be awarded to a student who completes a total of 12 credits.

Each course will have

- 50 % of marks for Final Examination
- 50 % marks for Internal Assessment

Each core unit will have an Internal (continues) assessment of 50 % of marks and a teacher may select a minimum of two of the following procedures:

- Written Test
- Lecture / Library Notes
- Seminar Presentation
- Short Quizzes
- Assignments
- Field Work
- To pass a student shall have to get minimum aggregate 30% marks in each head of passing (i.e. internal assessment and final examination) and minimum aggregate 40% marks in each course.
- Internal assessment answer book may be shown to the students concerned but not the final examination answer scripts.
- While marks will be given for all examinations, they will be converted into grades. The final grade sheets and transcripts will have only grades and grade-points average.
- To pass a student shall have to get minimum aggregate 40% marks (E and above on grade point scale) in each course.
- The system of evaluation will be as follows: Each assignment/ test will be evaluated in terms of marks. The marks for separate assignment and the final examination will be added together and converted into a grade and later grade

point average. Results will be declared after the final examination which will give grades, grade point average and the Final Grade.

EVALUATION SCALE FOR INDIVIDUAL SUBJECT:-

Percent			Grade		Grade Points
80	to	100	O :	Outstanding	10
70	to	79	A + :	Excellent	09
60	to	69	A :	Very Good	08
55	to	59	B+ :	Good	07
50	to	54	B :	Above Average	06
45	to	49	C :	Average	05
40	to	44	P :	Pass	04
00	to	39	F :	Fail	00
--			Ab :	Absent	00

The formula for conversion of Grade point average (GPA) into the final grade

09.00	-	10.00	-	O
08.50	-	08.99	-	A+
07.50	-	08.49	-	A
06.50	-	07.49	-	B+
05.50	-	06.49	-	B
04.25	-	05.49	-	C
04.00	-	04.24	-	P
00.00	-	03..99	-	F

$$CGPA = \frac{\sum (\text{Grade Points} \times \text{Credits})}{\sum (\text{Earned Credits})}$$

STRUCTURE OF FOUNDATION COURSE IN OUTDOOR RESCUE AND DISASTER MANAGEMENT

‘Foundation Course in Outdoor Rescue and Disaster Management’ shall be of 600 marks as follows:

Part	Subject Code	Subject Name	Hours	Credits
I Theory	ORD-101	Disaster Management - I	30	02
	ORD-102	First Aid , Search & Rescue - I	30	02
	ORD-103	Soft Skills, Health Science & Technical Skills - I	30	02
	Total Part-I		90	06
II Practical	ORD-104	Disaster Management – II (Practical)	60	02
	ORD-105	First Aid , Search & Rescue – II (Practical)	60	02
	ORD-106	Soft Skills, Health Science & Technical Skills – II (Practical)	60	02
	Total Part-II		180	06
Total Course			270	12

SYLLABUS

ORD – 101

Disaster Management - I

Credit	Topics	Content
1	Disaster Management - 1	<ul style="list-style-type: none">• What is Disaster• Types of Disaster• Classification & Characteristics• Impact
2	Disaster Management - 2	<ul style="list-style-type: none">• How to mitigate• National & Regional Policies• Management, Assessment, Recovery, Rehabilitation

ORD – 102

First Aid , Search & Rescue

Theory - I

Credit	Topics	Content
1	First Aid	<ul style="list-style-type: none">• Fundamentals for First Aid• CPR, Clearing Air way (Log roll & gutter, Chin lift etc.)• Wound management: cleaning, different types of Bandaging, Suturing• Fracture management: Immobilisation, Splints• Treatment for stings & bites: Snake, Insects, Scorpion• Administering Life saving injection (Intra muscular & Intra Venous)• Medical issues: Hypoglycemia, dehydration, shock etc.• Use of Pulse Oxymeter and supplementary oxygen
2	Search & Rescue	<ul style="list-style-type: none">• Introduction to Anchoring Systems• Safety equipment and regular checking• Subjective and Objective Hazards• Assessment of Hazards• Use of various types of stretchers (e.g. hard board stretcher for backbone fracture etc.)• Patient moves: techniques of safely moving a patient from ground to stretcher• Securing patient on stretcher with rope/sling• Improvised stretcher• Stretcher carriage on rough terrain

ORD - 103

Soft Skills, Health Science & Technical Skills Theory – I

Credit	Topics	Content
1	Communication & Effective Planning and Execution	<ul style="list-style-type: none">• Use of satellite phone and portable Radio set• Visual and audio signals• Distress signals• Procedure of communicating with authorities (police district administration etc.) and rescue team• Articulation of thoughts & speech• Effective presentation through experience sharing (articles, ppt, short film blogging/vlogging)• Learn to plan outdoor activity with every details• Reconnaissance of the destination• Logistical challenges during planning• Practical difficulties during execution• Debriefing and report making of the event
2	Knots & Equipment Outdoor Backpacking Technical Skills	<ul style="list-style-type: none">• Know the types of knots• Methods of tying knots• Introduction to personal safety gears• Trekking & Rock-Climbing gears• Equipment standards, Norms, & governing body• Backpacking essentials• Outdoor Camping• Precautions and preparation for tent pitching• Outdoor Clothing• Survival Skills & Navigation• Rock Climbing• Belay Skills• Rappel & Jumar Skills

ORD - 104

Disaster Management – II (Practical)

Credit	Topics	Content
1	Disaster Management-3	<ul style="list-style-type: none">• Drills in Disaster Management with Demonstration• Case Studies and analysis
2	Disaster Management-4	<ul style="list-style-type: none">• Field Visit to organizations such as NDRF• Field visit to the disaster Impacted regions

ORD - 105

First Aid , Search & Rescue – II (Practical)

Credit	Topics	Content
1	First Aid	<ul style="list-style-type: none">• Identifying the casualty• Providing the ABC of first aid• Immobilization skills• Handling wounds, bites, burns• Casualty carrying techniques• Casualty coil making• Treatment in illness• Bandaging• CPR skills
2	Search & Rescue	<ul style="list-style-type: none">• Rope Knots & Friction Hitches used in Rescue• Use of tape sling & tape knots• Z-pulley, Double pulley systems (Petzl Gemini)• Assisted method (one man rescue)• Face Rescue• Cliff Rescue• Chimney Rescue• Carriage of Casualty• Instant Tyrolean traverse• River Crossing Techniques & Casualty Evacuation• Casualty evacuation through Suspension and Tyrolean traverse• Use of shrubs for anchor

ORD - 106

Soft Skills, Health Science & Technical Skills – II (Practical)

Credits	Topics	Content
1	Communication	<ul style="list-style-type: none"> ⑩ Effective presentation through experiencesharing (articles, ppt, short film blogging/vlogging) ⑩ Collaborate in group activities to develop mutual trust, accountability, and team goal-orientedwork
	Effective Planning & Execution	<ul style="list-style-type: none"> • Learn to plan outdoor activity with everydetails • Reconnaissance of the destination • Logistical challenges during planning • Practical difficulties during execution • Debriefing and report making of the event
	Documentation	<ul style="list-style-type: none"> • Critically analyze the subjects and make detailed documentation of the subject. • Use various tools – AV/ PPT/ Story tellingto demonstrate learning
2	Knots & Equipment	<ul style="list-style-type: none"> • Demonstrations: knots • Rope Coil – Butterfly, Casualty • Introduction to personal safety gears
	Outdoor Camping, Backpacking	<ul style="list-style-type: none"> • Learn to pitch tent • Learn how to pack your backpack efficiently • Navigation skills
	Rock Climbing	<ul style="list-style-type: none"> • Types of hand & foot holds • Three-point technique • Top Rope Climbing
	Rappelling & Jumaring And Belaying	<ul style="list-style-type: none"> • Perform and master the art of rappelling and jumaring • Learn various techniques of rappelling & jumaring in various scenarios • Different belay devices • Different belay types • Introduction to station belay , body belay etc.

Books for Reference

- Eng, R. C., & Van Pelt, J. (Eds.). (2010). Mountaineering: The freedom of the hills. Mountaineers Books.
- Long, J. (2010). How to rock climb!. Rowman & Littlefield.
- Youngblood, G. S., & Baumgartner, G. J. (2000). Climbing anchors. U.S. Patent No. 6,119,993. Washington, DC: U.S. Patent and Trademark Office.
- Donahue T. (2016). Advanced Rock Climbing: Expert Skills and Techniques (Mountaineers Outdoor Experts). Mountaineers Books.
- Cosley, K., & Houston, M. (2004). Alpine climbing: Techniques to take you higher. The Mountaineers Books.
- Tyson, A., & Loomis, M. (2006). Climbing Self-rescue: Improvising Solutions for Serious Situations. The Mountaineers Books.
- Bob Gaines B., & Martin J. D. (2014). Rock Climbing: The AMGA Single Pitch Manual (How To Climb Series). Falcon Guides; First edition.
- Chauvin, M., & Coppolillo, R. (2017). The Mountain Guide Manual: The Comprehensive Reference--From Belaying to Rope Systems and Self-Rescue. Rowman & Littlefield.
- Young Zingaroo, सांगाती सहयाद्रीचा (Marathi Edition)
- Anand Palande, डोंगरयात्रा (Marathi Edition)
- Anand Palande, चढाई उतराई (Marathi Edition)
- Disaster Management and Preparedness - Future Challenges and Opportunities
- National Hazards - Disaster Management
- Disaster Management Handbook