SPORTS AUTHORITY OF INDIA

भारतीय खेल प्राधिकरण

NETAJI SUBHAS NATIONAL INSTITUTE OF SPORTS : PATIALA

SYLLABUS FOR DIPLOMA IN SPORTS COACHING

DISCIPLINE: ROWING

COURSE CODE: RO - 16

Total Credits: 24	**Semester - I**	**L**	**Assignment**	**P/FW**	**SW**	**TOTAL CREDIT UNITS**
		60	6	232	14	12
		(L-Lecture, P-Practical, SW-Self Work, FW-Field Work)				
	Semester - II	**L**	**Assignment**	**P/FW**	**SW**	**TOTAL CREDIT UNITS**
		60	6	248	14	12
		(L-Lecture, P-Practical, SW-Self Work, FW-Field Work)				

COURSE OBJECTIVES:

- To understand the rule of racing and follow the rules
- To build understanding of terminologies used in rowing
- Understanding the different parts of boat and Oars
- The understanding of the layout of boat house and the boat storing stands
- To develop the knowledge of indoor rowing machine, its assembling, performance monitor and different training conducting on it.
- To introduce the students regarding the laying of rowing lanes for the conduction of competition or practice
- To develop the knowledge on the maintenance and basic repairing of rowing boats and equipment
- Importance of safety and understanding of survival swimming and rescue operations
- To build understanding on different strength and conditioning methods

used in rowing

- To impart the basic knowledge on how to correct the faults
- To build understanding about the injuries and the methods of preventing them in rowing
- Understanding the biomechanics of rowing
- Understanding of different modalities used to teaching rowing to beginners

LEARNING OUTCOMES:

Students will able to implement the rules in a tactical way and the overall understanding of matters related to Rules during competition and training period.

The potential coaches also get the knowledge of different terminologies used in rowing, different classifications of boat and their play field i.e. a 2000m race distance.

Coaches will able to train the athletes of two different weight categories i.e. light weight and heavy weight crews for a competition

Also learn the right usage of space at boat house area and maintenance of boat jetty, boat house

They will get the basic knowledge of laying the buoyed lanes for competition and practices

The Coach will get the clear picture on maintenance and repairing of the rowing boat and equipment

Coaches will understand the importance of safety and also learn some rescue operations with swimming.

- By the end of the course, the coaches will learn the basic function of Indoor rower the functions of performance monitor and the conduction of an indoor rowing competition.
- The coach will able to conduct a talent identification test.
- They will be capable to teach the technique involved in rowing to their trainees
- They will have to get the practical knowledge to implement warming up and cooling down in training schedule successfully
- The potential coach will become to set a boat and oars according to athlete.
- They will be capable of conducting strength conditioning session in rowing successfully.
- They will be able to observe and correct the technique by using biomechanical knowledge

SKILLS DEVELOPED:

The principles behind delivering effective reviews from video analysis

Use of modern technology within the sport

Planning sessions

Profiling and training charts

Advance rigging of the boat

DETAILED SYLLABUS - SEMESTER I					
THEORY I					
Total Credit: 4					
Unit No.	**Description/Topics Covered**	**Teaching Method**	**No. of Hours (period)**	**Online/ Class room**	**Faculty**
1.	**INTRODUCTION TO ROWING**	**L**	**15**	**Classroom**	**Inhouse & Guest**
	1) Rules and Interpretations. • FISA • RFI **Important Terminology Used in Rowing** **Facilities and Their Management** A) Construction of Boat House, Boat Jetty B) Laying of Rowing Tracks C) Maintenance of Training Boat				
2.	**TRAINING AND CONDITIONING IN ROWING**	**L**	**15**	**Classroom/ Online**	**Inhouse**
	Specific Warming up and cooling down • Training • Competition **Land conditioning in Rowing**				

	• Iso-Kinetic machine exercises • Strength Training • Circuit Training • Core training **Indoor rower** • History and development • Assembling of indoor rower. • Analysis of monitor. • Various standardized test conducted on Indoor rower. • Indoor rowing competition				
3	**TEACHING ROWING AND SCIENTIFIC PRINCIPLES INVOLVED IN ROWING** **Teaching Rowing to beginners** • Indoor Rower • Paddling pool • Trainer boat **Safety& Rescue** • Basics of swimming • Safety Guidelines • Personal Safety • Self-Rescue • Assisted rescue • At Boat house • On Water **Mechanical Principles involved in Rowing**	**L**	**15**	**Classroom**	**In-House A Professor from outside will teach the subject Mechanical principle involved in rowing**

	• Resistance effected in boat • Motion of the boat **Bio Mechanics of Rowing**				
4	**BASIC RIGGING AND TECHNICAL ANALYSIS OF STROKE PATTERN**	**L**	**15**	**Classroom**	**Inhouse**
	Basic Rigging • Oars setting • The angle, height and placement of the foot stretcher • The height of the swivel • The spread in sculling and sweep rowing **Technical Analysis of stroke Pattern.** • Drive phase • Recovery phase • Transition elements of stroke • Stroke Length • Speed of the boat				

PRACTICAL I					
Total Credit:8					
Unit No.	**Description/Topics Covered**	**Teaching Method**	**No. of Hours (period)**	**Online/ Class room**	**Faculty**
1	**Introduction of Rowing boat and equipment** a) TERMINOLOGY used in Rowing b) Parts of boat c) Taking out of Boats d) Return to stand e) Parts of Oars	**P-15**	**30**	**Field**	**Inhouse**
2	**Safety& Rescue** a) Basics of swimming b) Safety Guidelines c) Personal Safety d) Self-Rescue e) Assisted rescue	**P-20**	**40**	**Classroom**	**Inhouse**
3	**Facilities and their management** a) Laying of rowing tracks b) Construction of boat house, boat jetty	**P-15**	**30**	**Field**	**Inhouse/Guest**

	c) Maintenance of training boat d) Basic Motor boat operations				
4	**Specific Warming up and cooling down** a) Training b) Competition	**P-4**	**8**	**Field**	**Inhouse**
5	**Teaching Rowing to beginners** a) Swimming lessons b) Indoor Rower c) Paddling pool	**P-8**	**16**	**Field**	**Inhouse**
6	**Mechanical Principles involved in Rowing** a) Resistance effected in boat b) Motion of the boat c) Bio Mechanics of Rowing	**P-2**	**4**	**Field**	**IINHOUSE (Lectures of Bio Mechanics in LNCPE will teach the specific Bio₩ of Rowing)**
7	**Technical Analysis of stroke Pattern** a) Drive phase b) Recovery phase c) Transition elements of stroke d) Speed of the boat	**P-20**	**40**	**Field**	**Inhouse**
8	**Rigging** a) Oars setting b) The angle, height and placement of the foot stretcher	**P-15**	**30**	**Classroom/Field**	**Inhouse**

	c) The height of the swivel d) The spread in sculling and sweep rowing				
9	**Land conditioning in Rowing**	**P-20**	**40**	**Field**	**Inhouse/Guest**
	a) Iso-Kinetic machine exercises b) Strength Training c) Circuit Training d) Core training				

DETAILED SYLLABUS - SEMESTER II

THEORY II

Total Credit: 4

Unit No.	Description/Topics Covered	Teaching Method	No. of Hours (period)	Online/ Class room	Faculty
1.	**Interpretation of Rules. Faults and Corrections. Common injuries in Rowing**	**L-18**	**18**	**Classroom /Online**	**Inhouse**
	I) Interpretation of Rules • Rules of Racing and related Bye-Laws • Para Rowing rules **II) Faults and Corrections.** • Importance				

	• Methods • During Training • During Competitions				
2	**TESTS AND CONTROL.** **I)Tests and Control** • Maximal Test - 2000M • Sub maximal Test • 1 min max • VO2 max • 10 sec max **II) Control** • Daily • weekly • monthly • Quarterly	**L-6**	**6**	**Classroom /Online**	**Inhouse**
3	**Programming, Advanced Rigging and Monitoring Devices** • Fundamentals of preparing a training • Schedule for Rowing • Planning in Rowing. • Means and methods of training • Crew Selection - Seat Racing • Race plan	**L-20** **SW-4**	**24**	**Classroom/Online**	**Inhouse** (Lectures of GTMT in LNCPE will teach the specific Planning in Rowing.)

	• Nutrition and Hydration **Advanced Rigging &** **Monitoring devices** • Pitch of the Oar lock • Pitch of the Oar • Rigging Chart • Stroke Coach • Speed Coach • Stop watch • Familiarization of internet and MS Office in Sports training. • Video analysis of International coaching classes				
4	**Identification of Talents, Knowhow of other Rowing activities:** • Anthropometrical aspects of trainee. • Basic motor qualities, test and measurements. • Physiological • Psychological • Selection criteria. **Knowhow of other Rowing activities:** • Para Rowing • Costal Rowing	**L-10** **SW-1** **FW-1**	**12**	**Classroom/Online**	**Inhouse and Guest**

	• Masters Rowing				

PRACTICAL II					
Total Credit: 8					
Unit No.	**Description/Topics Covered**	**Teaching Method**	**No. of Hours (period)**	**Online/ Class room**	**Faculty**
1.	**Application of Rules** a) Rules of Racing and related Bye-Laws b) Para Rowing rules	**P-5**	**10**	**Field**	**Inhouse**
2	**Faults and Corrections** a) Methods b) During Training c) During Competitions	**P-20**	**40**	**Field**	**Inhouse**
3	**Teaching and Coaching Practice.**	**P-26**	**50**	**Field**	**Inhouse and Guest**
4	**Common injuries in Rowing** a) Causes b) Prevention	**P-2**	**10**	**Classroom/Online**	**Inhouse/Guest**
5	**Indoor rower**	**P-20**	**35**	**Field**	**Inhouse**

	a) Assembling of indoor rower. b) Analysis of monitor. e) Different training in Ergo meter				
6	**Advanced Rigging & Operations of Monitoring devices**	**P-13**	**48**	**Field**	**Inhouse**
	a) Pitch of the Oar lock b) Pitch of the Oar c) Rigging Chart c) Stroke Coach d) Speed Coach e) Stop watch				
7	**Identification of Talents.** a) Anthropometrical aspects of trainee. b) Basic motor qualities, test and measurements. c) Physiological d) Psychological e) Selection criteria.	**P-4** **FW-2**	**12**	**Field**	**Inhouse/Guest**
8	**Programming** a) Fundamentals of preparing a training schedule for Rowing b) Planning in Rowing. c) Means and methods of training	**P-20** **FW-3**	**33**	**Field**	**Inhouse/Guest**

	d) Crew Selection - Seat Racing e) Race plan				

Training Books, Journals, Online Resources Prescribed for Trainees

FISA Rule Book, FISA (http://www.worldrowing.com/fisa/publications/rule-book)

Volker Nolte, *Rowing Faster*

http://www.worldrowing.com/fisa/publications/training

https://www.fortworthrowing.org/uploads/7/4/3/3/74330847/level_2_coaches_manual.pdf

ASSESSMENT			
Theory Monthly Assessments	**Semester 1**	**Semester 2**	**Internal/External %**
	CA 1	CA 2	(I) 40%/ (E)60%
Monthly Practical/Lab/Field	✓	✓	(I) 40%/ (E)60%
Monthly Assignments	X	✓	(I) 40%/ (E)60%
Project/Research Work	X	✓	(I) 40%/ (E)60%