

Ordinance Governing Fellowship in Aquatic Therapy

Syllabus / Curriculum 2022



KLE UNIVERSITY

JNMC Campus, Nehru Nagar, Belgaum- 590010, Karnataka,
India. Phone: + 91- 831- 2472777,24793777 FAX: +91 831
2493777

E-mail: info@kleuniversity.edu.in Website: kleuniversity.edu.in

Edition Year: 2015

© Registrar

E-mail: registrar@kleuniversity.edu.in

Director, Academic Affairs
KLE University
JNMC Campus, Nehru Nagar,
Belgaum-590010
Ph: 0831-2472777 e-
mail:info@kleuniversity.edu.in

Printed at:

VISION

To be an outstanding University of excellence ever in pursuit of newer horizons to build self-reliant global citizens through assured quality educational programs.

MISSION

- ◆ To promote sustainable development of higher education consistent with statutory and regulatory requirements.
- ◆ To plan and continuously provide necessary infrastructure, learning resources required for quality education and innovations.
- ◆ To stimulate to extend the frontiers of knowledge, through faculty development and continuing education programs.
- ◆ To make research a significant activity involving staff, students and society.
- ◆ To promote industry/organization, interaction/collaborations with regional/national / international bodies.
- ◆ To establish healthy systems for communication among all stakeholders for vision oriented growth.
- ◆ To fulfill the national obligation through rural health missions.

OBJECTIVES

The objectives are to realize the following at university and its constituent institutions:

- ◆ To implement effectively the programs through creativity and innovation in teaching, learning and evaluation.
- ◆ To make existing programs more careers oriented through effective system of review and redesign of curriculum.
- ◆ To impart spirit of enquiry and scientific temperament among students through research oriented activities.
- ◆ To enhance reading and learning capabilities among faculty and students and inculcate sense of lifelong learning.
- ◆ To promulgate process for effective, continuous, objective oriented self performance evaluation.
- ◆ To ordinate periodic performance evaluation of the faculty.
- ◆ To incorporate themes to build values, civic responsibilities & sense of moral integrity.

- ◆ To ensure that the academic, career & personal counseling are in-built into the system of curriculum delivery.
- ◆ To strengthen, develop and implement staff and student welfare programs.
- To adopt and implement principles of participation, transparency and accountability in governance of academic and administrative activities.
- To constantly display sensitivity and respond to changing educational, social, and community demands.
- To promote public- private partnership.

INSIGNIA



The Emblem of the University is a Philosophical statement in Symbolic.

The Emblem...

A close look at the emblem unveils a pillar, a symbol of the “University of Excellence” built on strong values & principles.

The Palm and the Seven Stars...

The Palm is the palm of the teacher - the hand that acts, promises & guides the students to reach for the Seven Stars...

The Seven Stars signify the ‘Saptarishi Dnyanamandal’, the Great Bear- a constellation made of Seven Stars in the sky, each signifying a particular Domain. Our culture says: The true objective of human birth is to master these Knowledge Domains.

The Seven Stars also represent the Saptarishis, the founders of KLE Society whose selfless service and intense desire for “Dnyana Dasoha” laid the foundation for creating the knowledge called KLE Society.

Hence another significance of the raised palm is our tribute to these great Souls for making this University a possibility.

Empowering Professionals...

‘Empowering Professionals’, inscription at the base of the Emblem conveys that our Organization with its strength, maturity and wisdom forever strive to empower the student community to become globally competent professionals. It has been a guiding force for many student generations in the past, and will continue to inspire many forth coming generations.

NOTIFICATION

This page is intentionally kept blank
CONTENTS

Sr. No. Topics Page No.

Section I	Preamble	7
Section II	Goals of Fellowship in Aquatic Therapy	8
Section III	Aims and Objectives of Fellowship in Aquatic Therapy	9
Section IV	Regulations Governing Fellowship in Aquatic Therapy	11
Section V	Subjects and Teaching Schedule	14
Section VI	Scheme of Examination	19
Section VII	Fellowship in Aquatic Therapy	22

Section-I

PREAMBLE

Health and fitness as identified by many health agencies like world health organization (WHO) is the major concern for the world. With change in lifestyle as well as the advancement in science has led to more of machines replacing the human beings, it is more of mental skill and work than that of physical work, leading to many health hazards.

Aquatic Exercises are planned and structured physical activities for the purpose of recovery for any part of the body. Aquatic Exercises are to improve health and fitness and is important as a means of physical rehabilitation. The scarcity of trained professionals leads to amplification of the problems faced by the community

The present course is initiated with an intention to enable the Physiotherapist or health professionals to gain knowledge and skill to train for health and illness and to address the global problem of health and fitness.

Section-II

Goals of Aquatic Therapy

Various Goals of education & training of fitness courses at KLE University are as follows:

- ◆ Teach common problems of health and disease.
- ◆ Provide educational experience that allows hands on experience both in hospital, Physiotherapy centres as well as in community setting for health benefit of community members/ individuals.
- ◆ Make maximum efforts to encourage integrated teaching methods.
- ◆ Use learner-oriented methods which encourage clarity of expression, independence of judgment, scientific habits, problem solving abilities, self-initiated and self-directed learning.
- ◆ Use of active methods of learning such as group discussions, role play demonstrations, peer interaction, etc which would enable to develop personality, communication skills and other qualities which are necessary.
- ◆ Establish an Aquatic therapy education unit for faculty development, preparation of learning resource materials and for imparting evaluation methods.

Section-III

AIMS AND OBJECTIVES Fellowship in Aquatic Therapy

- To provide knowledge of global standard in theory and hands - on skill to the certified students
- To provide detailed knowledge of Aquatic Therapy Concepts.
- Provide professional Certification.
- Enable physiotherapists to qualify and work as Aquatic therapy professionals.

Section-IV

REGULATIONS FELLOWSHIP IN AQUATIC THERAPY

Eligibility: A candidate seeking admission to Aquatic therapy courses should have completed MPT/MOT.

Duration of the Course: Every student shall undergo a period of certified study extending over 11 months from the date of commencement.

Attendance: Every candidate should have attendance not less than 90% of total classes conducted in theory and practical.

Examination system: Theory as well as Practical examination will be conducted at the end of the course.

Criteria for Pass:

90% ATTENDANCE IN THEORY AND PRACTICAL CLASSES

50 PERCENT PASSING MARKS IN THEORY AND PRACTICAL

Section- V

SUBJECTS AND TEACHING SCHEDULE

Table V: FELLOWSHIP IN AQUATIC THERAPY

Subject code	Name of the subject	Teaching hours		
		Theory	Practical	Total
	Basic Aquatic Therapy	160	860	1020
	Advanced Aquatic Therapy	160	860	1020
	TOTAL	320	1720	2040

Section- VI

Not Applicable

Sl. No.	Subject	Theory		Practical		Grand Total
		Written		Practical	Viva Voce	
		Time	Maximum Marks	Maximum marks	Maximum marks	
1	Paper 1 Basic Aquatic Therapy	1.5 hours	50	25	25	100
2	Paper 2 Advanced Aquatic Therapy	1.5 hours	50	25	25	100

Not Applicable

Table VIII: SCHEME OF EXAMINATION FOR FELLOWSHIP IN AQUATIC THERAPY

Guidelines for Theory Examinations

Type of Questions	Marks
Long Essay Question = 2x10 (2question)	20
Short essay type =6x5 (Four question)	30
Total	50
Duration	1.5 Hours

Guidelines for University Practical Examinations

Type of Questions	Marks
One long case	20
Two short case (2x15)	30
Total	50
Duration	8Hours
Students allotted	5/day

Maximum Number of attempts = 03

Valuation system	Double valuation system.
Examiner for Practical.	1 External Examiner & 1 Internal Examiner

SUBJECTS AND TEACHING SCHEDULE

FELLOWSHIP IN AQUATIC THERAPY

This is a specially designed course for physiotherapy graduates to enable them to deal with Neurological, Musculoskeletal and Cardiorespiratory diseases more efficiently with Aquatic Therapy. This course will enable them to understand the requirement and the prerequisites for the enhancement of the individual's rehabilitation. Prevention of further complications and faster recovery to maintain ICF model with special emphasis on scientifically designed aquatic therapy program.

CREDIT HOURS: 180 Hours for 1 month.

6 days of intensive and 18 days of pool practicums with patients.

CONTENTS:

Paper 1 Basic in aquatic therapy

A) Basics

- History of Aquatic Therapy
- Benefits of Aquatic Therapy
- Physiological Effects of Immersion
- Therapeutic Effects
- Precautions
- Clinical Decision Making: Land vs. Water

B) Aquatic Therapy in Neurorehabilitation: Pediatrics and Adult-

- Water Specific Therapy in Pediatrics, and Neuro Application
- Bad Ragaz and Neuro and pediatrics Applications, Including Passive, Isometric, and Isotonic Patterns for The Trunk (Pool)
- Bad Ragaz Neuro and pediatric Applications for trunk and extremities. (Pool)
- Aqua T Relax in Neurological and pediatric Conditions.

C) Assessment and Intervention

- Patients Assessment on Land for neurological and pediatric conditions

- WOTA scale and ICF model for neurological and pediatric conditions
- Pediatric and neurological Patients' treatment (Pool)

B) Aquatic Therapy in Musculoskeletal and Sports Rehabilitation-

- Water Specific Therapy in Musculoskeletal and Sports Rehabilitation, Application
- Bad Ragaz in Musculoskeletal and Sports Rehabilitation Applications, Including Passive, Isometric, and Isotonic Patterns for The Trunk (Pool)
- Bad Ragaz in Musculoskeletal and Sports Rehabilitation Applications for trunk and extremities. (Pool)
- Ai chi Applications in Musculoskeletal and Sports
- Aqua T Relax in in Musculoskeletal and Sports Rehabilitation Conditions.

Assessment and Intervention

- Patients Assessment on Land for in Musculoskeletal and sports rehabilitation conditions
- WOTA scale and ICF model for in Musculoskeletal and sports rehabilitation conditions
- Musculoskeletal and sports Patients' treatment (Pool)

C) Aquatic Therapy in Women's health and Geriatric Conditions-

- Water Specific Therapy in Women's health and Geriatric Conditions, Application
- Bad Ragaz in Women's health and Geriatric Conditions Applications, Including Passive, Isometric, and Isotonic Patterns for The Trunk (Pool)
- Bad Ragaz in Women's health and Geriatric Conditions Applications for trunk and extremities. (Pool)
- Ai chi Applications in Women's health and Geriatric Conditions
- Aqua T Relax in in Women's health and Geriatric Conditions.

Assessment and Intervention

- Patients Assessment on Land for in Women's health and Geriatric Conditions
- WOTA scale and ICF model for in Women's health and Geriatric Conditions
- Women's health and Geriatric Conditions patient treatment (Pool)

D) Aquatic Therapy in Covid Rehab

- Application of Aquatic Therapy techniques in post Covid Rehabilitation

Paper II: Advanced Aquatic Therapy

Aquatic Therapy Concepts

a) Halliwick and Water Specific Therapy

- a. Shallow and Deep -Water Techniques Including
- b. Trunk Stabilisation
- c. Proximal Stability & Extremity Strengthening
- d. Balance and Coordination
- e. Functional Skill Training

b) Bad Ragaj Application

Application of techniques in research

c) Clinical Decision Making: Which is best Aquatic Therapy Techniques

d) Assessment and Intervention

Recording and assessment.

- Patients Assessment on Land
- WOTA scale and ICF model
- Patients' treatment (Pool)

e) Blending of Aquatic Therapy Techniques.

f) Best Intervention used for optimal recovery

References:

1. deVierville J. A history of aquatic rehabilitation. In: Cole A, Becker B, eds. *Comprehensive Aquatic Rehabilitation*. 2nd ed. Philadelphia PA: Butterworth-Heinemann; 2004:1-18
2. Poyhonen T, Keskinen KL, Hautala A, Malkia E. Determination of hydrodynamic drag forces and drag coefficients on human leg/foot model during knee exercise. *Clin Biomech (Bristol, Avon)* 2000;15:256-260.
3. *Comprehensive Aquatic Therapy book 3rd edition 2010*, edited by Bruce E. Becker and Andrew J. Cole.
4. *Bad Ragaj Ring Method* by Urs N. Gamper and Johan Lambeck.
5. *Ai chi and Aqua T relax* by Anne Bommer and Johan Lambeck.
6. Davies BC. A technique of re-education in the treatment pool, *Physiotherapy* 1967; 53-57-59
7. Becker A. A Bad Ragaj Ring Method variations for use with the Cervical spine. *The journal of Aquatic Physical therapy* 1997; 5; 4-7.
8. Masunaga S. (1987), *Meridian Exercises*. Japan Publications, Tokyo.
9. Arnold C m, Faulkner RA. The effects of Aquatic Exercise and education on lowering fall risk in older adults with hip osteoarthritis, *Journal of aging and physical activity*. 18(3);245-260
10. WHO, World Health Organization (2001), *International Classification of Functioning, Disability and Health*, WHO press: Geneva.

