## MGM INSTITUTE OF HEALTH SCIENCES

(DEEMED UNIVERSITY u/s of 3 UGC Act, 1956) Accredited by NAAC with "A" Grade

### 5.1.2 Details of Capability Enhancement Skills

- 1. Soft skills development
- 2. Language and Communication Skill Development
- 3. Yoga and wellness
- 4. Analytical skill development
- 5. Human value development
- 6. Personality and professional development
- 7. Employability skill development

# SOFT SKILL DEVELOPMENT Mahatma Gandhi Mission

### 1. Soft Skill Development

### a. Soft skill Holistic Development Workshop

This is a Value added course. This soft skill provides an insight into vital role of soft skills in personal and professional effectiveness. The objectives of this workshop is to practice active listening skills and responding skills for effective communication and describe different leadership styles to accomplish organizational goals.

The course enables students to Establish effective interpersonal relationship with others, Understand importance of active listening and body language in communication, Select appropriate words and tone of voice in verbal and written communication, Identify strategies to improve interpersonal relationship, Develop skills in public speaking, Identifying appropriate personal and professional values for nursing practice, Describe potential source of stress and strategies for stress and conflict management and Develop skills in preparation and power point.



Workshop on Holistic Development

### b. Emotional Intelligence

This is a Value added course. Happiness through Enhanced Emotional Intelligence Emotional intelligence (EQ/EI) is defined as an ability to identify, consider and control emotions in oneself and to recognize them in others, brought on by a combination of self awareness, self management, social awareness and relationship management.

Intelligent quotient (IQ) correlates with academic success but often fails to assure personal and professional success. EQ on other hand is a spastically significant factor in achieving personal and professional growth. While IQ is inborn god gift; EQ can be improved by learning strategies in areas of self awareness, social awareness and relationship management. Most of the professional courses including medical courses offer little to improve EQ of participants in this course. Present value added course is designed to enable students/participants to lead a happy and fulfilling life by using strategies of EQ/EI.

### c. Soft Skill training

This Value added course was designed to train students in various soft skill techniques. The students will be trained in various problem sharing skills and stress management. The students will be trained in team work and group dynamics.



Session on Soft skill development

### d. Induction Program

Induction programs are carried out across all the specialties to orient students with the university. This program also aims to train students in communication skills, both with batch mates and patients. This helps to improve inter personal; relationships and maintain a good professional conduct.



Doctor-Patient interaction

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### 2. Language and Communication Skill Development

### a. Communication Skills

This Value added course is designed to enable students to understand and apply knowledge of human communication and language processes as they occur across various contexts, e.g., interpersonal, intrapersonal, small group, organizational, gender, family, intercultural communication, technologically mediated communication, etc. from multiple perspectives. It will help students to understand and evaluate key theoretical approaches used in the interdisciplinary field of communication.



Lecture on Communication skills

## b. Marathi Language Enrichment Programme for UG & PG; Institute of Indian and Foreign Language Communication

Institute of Indian and Foreign language communication conducts training program in Marathi language for students who are not well versed with Marathi language. This will help the students to develop better communication skills with peers and patients from the local community.

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### d. English Language training in Curriculum

The BSc Nursing curriculum has an English training course. It is designed to enable students to enhance ability to comprehend spoken and written English (and use English) required for effective communication in their professional work. Students will practice their skills in verbal and written English during clinical and classroom experience. The course of Optometry also trains students in English and communication skills.





### 3. Yoga and Wellness

### a. Yoga Sessions for Undergraduate students across various programs

Yoga as a therapy has been in existence for Physiotherapy graduates in the Subject Fundamentals of Kinesiology and Kinesiotherapy. M.G.M Arogyam Naturopathy, Ayurveda and Yoga Center, conducts Yoga sessions for students of Medical college in Aurangabad.



Demonstration of Breath Control exercises for stress management



Yoga session for students

### b. International Yoga Day Celebration

International Yoga day is celebrated on 21<sup>st</sup> June every year. Various activities and Yoga sessions are conducted by MGMIHS on this day. Various external agencies have been a part of this program, namely heartfullness, Patanjali Yoga Samiti, International Research and health centre etc. These sessions help to create awareness on effects of Yoga on Body and mind and stress management.





YOGA SESSIONS

## ANALYTICAL SKILL DEVELOPMENT

### 4. Analytical skill development

### a. Research Methodology

The course aims at developing the scientific attitude from the very beginning i.e. from undergraduate level, so that it will formulate a base building strong foundation of research. It will enable the undergraduate student to apply the most appropriate methodology for their research studies. The course is structured in a way that it will clarify the theoretical concepts as well as student will learn the practical aspects. This course will concretize the fundamental concepts and analytic methods. It will include topics spanning from introduction to manuscript writing. Hands on training on data analysis will fully equip them to carry out quality research.



Research methodology training – Reviewing recent literature

### b. Data Analysis using SPSS

MGM Institute of Health Sciences has qualified expert Dr. Rita Abbi who has been providing guidance and conducting continuous hands on training for faculties, researchers, PG students and supporting scholars in diverse health care research and academic fields to produce high-quality dissertations and theses. Use of latest version 24.0 SPSS for data analyses from 2017 and hands on training made a difference in applications of SPSS for improving the quality of research.



**SPSS** training session by Dr. Rita Abbi





### 5. Human value development

### a. Gender Sensitization

Gender of a person and attitude of people towards gender have very high impact on personal and social health. Gender discrimination, female feticide, sexual harassment and abuse are results of unhealthy gender attitude. This develops unknowingly because of peculiar sexual socialization. Only information about reproductive system will not be able to change this attitude as It involves de-learning and re-learning. There is need for proactive efforts to develop healthy gender attitude. This course is introduced to deal with these issues and will help to find solutions, This course is in addition to inclusion of gender sensitization in curriculum.

### **b.** Environment Protection

This Value added course is to facilitate students understanding of complex environmental issues from a problem-oriented, interdisciplinary perspective. Understand core concepts and methods from ecological and physical sciences and their application in environmental problem-solving. Appreciate key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions. Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems. Appreciate that one can apply systems concepts and methodologies to analyze and understand interactions between social and environmental processes. Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.

### c. Road Safety and traffic rules

This Value added course will enable students to measure the magnitude and impact of road traffic injuries, assess the key risk factors, Strengthen the evidence base for prevention, Implement promising interventions, Deliver post-crash care and transfer techniques and Formulate and implement road safety policies.

### d. Inner Transformation Program

Health care professionals find that stress has a huge impact on their patient's health and their own. Students learn basic Heartfulness practices to manage their own stress and emotions, and improve the quality of life; 'Centered Students: where 'centeredness' is defined as a person who is self-confident, emotionally stable and well balanced. A life where stress is well managed, leading to a joyful and happy society. Students displaying values of compassion and respect for each other.





**Blood Donation Drive** 

**Tree Plantation** 



**Gender Sensitization Program** 

# PERSONALITY AND PROFESSIONAL DEVELOPMENT

### 6. Personality and Professional development

### a. Campus Interviews

Campus interviews are organized where external agencies guide the outgoing students on career advancement and personal; interviews are conducted for students willing to join the specific organization. This helps to improve aptitude and communication skills. It develops a sense of confidence and sets a benchmark in paving the career ahead. It helps them in honing their skills and building a fruitful career.



**Personal Interview** 



Career counselling by Aquacentric

### b. Medico-legal issues in medical practice

Medico legal cases(MLC) are an integral part of medical practice that is frequently encountered by doctors. The occurrence of MLCs is on the increase,

both in the Civil as well as in the Armed Forces. Proper handling and accurate documentation of these cases is of prime importance to avoid legal complications.

### c. Holistic Development

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### d. Induction Programs

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### e. Mentorship Programs

Mentorship programs are designed with an aim of providing, a reliable and comprehensive support system, to motivate students to excel in both academic and non-academic fields and to make the most of their life at the college. The objectives of the program include:

- To help the first year students understand the challenges and opportunities present in the college and develop a smooth transition to campus life.
- To counsel academically weak undergraduate students and to play an important role in helping troubled students cope with academic, extra-academic and personal problems.
- To proactively try to identify problems of the general student populace and to bring them to the notice of the concerned authorities

### f. Government initiatives-Pariksha pe charcha

The Hon'ble Prime minister of India, addressed students all over the country through an online session. The guided the students and teachers to discusses ways to beat exam stress. The five topics that were given included:

- 1. Gratitude is Great: A short write-up on people, who a student thinks played an important role in their academic journey and why they are grateful to that person.
- 2. Your future depends on your Aspirations: An essay on the goals and career aspirations of students
- 3. Examining Exams: Student needed to write their opinions on prevailing examination systems and suggestions how to better it.
- 4. Our Duties, Your Take: Essay on duties of citizens and how one can inspire everyone to become more dutiful citizens.
- 5. Balance is Beneficial: A write-up on balanced activities of students apart from their curriculum.

PM Modi urged students to remain stress-free which would in turn help them to concentrate better and score good marks and attain excellence in their studies.

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## EMPLOYABILITY SKILL DEVELOPMENT

### 7. Employability Skill Development

### a. BLS Provider course

This Value added course was built to Provide safe environment for repeated practice of various Basic skills and to increase patient safety. At the end of course the student should be able to Recognize cardiac arrest, Provide effective chest compressions, Provide artificial ventilation, Use AED, Provide First aid for common medical emergencies like trauma, hemorrhage, Burns, poisoning, Snakebite & dog bite etc and to teach communication skill and team dynamics.





### **BLS TRAINING**





### b. ACLS Provider course

The ACLS Provider Course is an advanced two day course which involves recognition of complex scenarios like cardiac arrest, arrhythmias, acute coronary syndrome or stroke etc and involves the use of diagnostic and therapeutic interventions like electrocardiogram (ECG), transcutaneous pacer, defibrillator etc. This course is suitable for all medical, dental, physiotherapy, nursing and allied medical graduates, postgraduates and specialists working in a hospital or health care facility. To pursue the ACLS Course, the candidate has to possess a valid AHA BLS Provider Card.





### **ACLS TRAINING**





### c. Course on Computer Application

The goals of medical education are to provide students and graduate clinicians specific facts and information, to teach strategies for applying this knowledge appropriately to the situations that arise in medical practice, and to encourage development of skills necessary to acquire new knowledge over a lifetime of practice.

### d. Pharmacovigilance

WHO has defined Pharmacovigilance as the ~cience and activities dealing with Detection Assessment Understanding. Prevention of adverse drug reactions or any other possible drug related problems. Pharmacovigilance Programme of India (PvPI) aims to improve patient safety and welfare of Indian population by monitoring the drug safety and thereby reducing the risk associated with use of medicines to safeguard the health of the Indian population by ensuring that the benefits of use of medicine outweigh the risks associated with its use.

### e. Clinical Biomechanics

This course helps students to Understand basic methodology of movement analysis, Understand the principles of biomechanical modeling, Understand theories of movement control and loading, Able to integrate and apply the above to analyze movement problems encountered in patient population.

### f. Explore DNA Fragments

Objective of designing this course is to impart the skill for the students from different educational fields such as MLT, Biochemistry, Genetics, Microbiology, Pharmacology and other paramedical and MBBS students at Undergraduate, Post graduate and MD level in order to Learn about DNA Isolation, PCR experiment designing and electrophoresis analysis of DNA molecules.

### g. Zebrafish Husbandry Education

Zebrafish (Danio rerio) has become increasingly important model to scientific research, since 1960s. It has several unique characteristics that make it a valuable model for studying human genetics and disease. Zebrafish have a similar genetic structure to humans. They

share 70 per cent of genes with us. 84 per cent of genes known to be associated with human disease have a zebrafish counterpart. As a vertebrate, the zebrafish has the same major organs and tissues as humans. It is one of the fastest growing vertebrate organism. Zebrafish embryos are nearly transparent which allows researchers to easily examine the development of internal structures. Every blood vessel in a living zebrafish embryo can be seen using just a low-power microscope. One of the unique ability is to regenerate its heart muscle and fin. For example, if part of their heart is removed they can grow it back in a matter of weeks. These striking similarity to humans and novel characteristics has made this model to be widely used for various biomedical applications.

### h. PALS instructor course

The PALS Provider Course is a TWO day course (16HRS) and includes training in basic life saving skills which includes recognizing a cardiac arrest or other life threatening situations like choking and provides training in high quality resuscitation skills including chest compressions and airway support. The course also teaches the effective use of an Automated External Defibrillator (AED). This course is suited for all medical, dental, physiotherapy, nursing and allied medical graduates and health care professionals Successful completion of the course results in an AHA BLS Provider Card.

### i. Short course in advanced chest imaging

This Value added course was designed to make radiology professionals competent in physiological and anatomical aspects of cardiac and vascular imaging.

### j. Short course in advanced cardiac imaging

This Value added course was designed to make radiology professionals competent in physiological and anatomical aspects of cardiac and vascular imaging.

### k. Short course in advanced Neuro imaging

This value added course will help students to differentiate various types of focal intracranial lesions.

### 1. Course in advanced Body imaging

Students will develop expertise in the diagnosis and treatment of all diseases of abdomen and pelvis with special emphasis on hepatobiliary diseases, oncology, trauma, pre and post operative evaluations.

### m. Short course in Radiology related to orthopedics

This Value added course was designed to make radiology professionals competent in anatomical aspects of orthopedic imaging.

### n. Lateral Skull base dissection course

This Value added course was designed to make ENT surgery residents competent in upgrading knowledge on otolaryngology. The aim of this workshop is to train the senior ENT surgeons and take a step forward and expand its own limitation and get acquainted with lateral skull base.

### o. Temporal bone dissection

This Value added course was designed to make ENT surgery residents competent in upgrading knowledge on otolaryngology. The aim of this workshop is to train the senior ENT surgeons and take a step forward and expand its own limitation and get acquainted with temporal bone dissection.

### p. Critical care skill course

This Value added course was designed to train students in nbasic skills in Critical care. This will make students competent in all skills of Critical care.

### q. Airway Management course

Airway management includes a set of maneuvers and medical procedures performed to prevent and relieve airway obstruction. This ensures an open pathway for gas exchange between a patient's lungs and the atmosphere. This is accomplished by either clearing a previously obstructed airway; or by preventing airway obstruction in cases such as anaphylaxis, the obtunded patient, or medical sedation. Airway obstruction can be caused by the tongue, foreign objects, the tissues of the airway itself, and bodily fluids such as blood and gastric contents (aspiratio

### r. Microscope and staining technique

The development of the microscope is tightly coupled with developments in cell biology and medicine. Microscopes provide the observer with enhanced resolution (ability to observe two nearby objects as distinct objects), contrast (ability to detect different regions of the specimen on thebasis of intensity or colour) and magnification (ability to make small objects visible). The human eye can resolve objects of the order of 0.1 mm, while the light microscope can resolve objects on the order of 0.2 mm (200 nm) with a magnification of 1000X. The development of various types of optical microscopesincorporated the following components: microscope objectives that minimize chromatic and other optical aberrations (image distortion), stands that minimize mechanical vibrations and sources of illumination from sunlight to lasers. Additionally, there were new methods of fixing and cuttingspecimens (microtomes), specimen staining techniques (dyes, stains, molecular probes) that increase specimen contrast. Also important were the development of variousoptical methods that provide contrast (phase differentialinterference microscopes, fluorescence microscopes) for live cells, techniques for imaging long-term live cell cultures (timelapse and video-microscopy), optical techniques to provide optical sectioning of specimens (confocal microscopes), and nonlinearoptical imaging techniques (multiphoton, harmonic generation and coherent antiStokes Raman microscopes).

### s. Fundamentals of Genetics

Genetics is not only genes but evolution of biology on Earth, evolution of mankind with the help of DNA. The master molecule DNA is simply the carbon, hydrogen, nitrogen and oxygen. But, the specific bonding amongst these elements has formed deoxynucleic acid (DNA) which has power to replicate, and has a blue print of every life in its own unique way. It won't be an overstatement, to say that 'it's a single fundamental element that defines life on earth'. The variations in the DNA sequence lead to specific characteristics which are normal but also can be disease causing. Human genetics deals with study of chromosomes, DNA, RNA, proteins leading to

inherited characteristics, which are physical, mental, normal and abnormal, in an individual, a family, a race or population. The science of Genetics has progressed exponentially after human genome project in year 2003. We have mapped human genome which helps in understanding the genetic basis of characters, diseases and also helps in inventing new treatments for these diseases even at sub molecular level. We are on the brink of developing precision medicine, i.e. medicines based on genotype of particular individual. Gene therapy, Gene editing has already made success stories. As we are witnessing the next revolution in medicine as Genetics, it's imperative to provide knowledge, understanding, and application of genetics for human diseases. The Fundamentals of Human Genetics course will take all the students from basics to advances in Genetics and keep them updated about this filed which is going to have tremendous impact on medical practice in recent future.

