

# **DESH BHAGAT UNIVERSITY, MANDI GOBINDGARH**

## **FACULTY OF ALLIED HEALTH SCIENCES**

### **Master of Osteopathy**

#### **Semester 1**

**Course Code:** O101

**Title of the Course:** Anatomy

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
4	0	0	4

**Course Outcomes (COs)**

**CO 1:** A student will be able to understand and identify all gross anatomical structures; particular emphasis will be placed on description of bones, joints, muscles, brain, cardio-pulmonary and nervous systems as these relate to the application of Physiotherapy.

**CO 2:** Demonstrate different movements of joints, there attachments, palpate important bony landmarks.

**CO3:** A student should apply the gross anatomy knowledge while treating the patients.

**Course Code:** O101-A

**Title of the Course:** Anatomy (Pr)

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
0	0	4	2

**Course Outcomes (COs)**

**CO 1:** A student will be able to understand and identify all gross anatomical structures; particular emphasis will be placed on description of bones, joints, muscles, brain, cardio-pulmonary and nervous systems as these relate to the application of Physiotherapy.

**CO 2:** Demonstrate different movements of joints, there attachments, palpate important bony landmarks.

**CO3:** A student should apply the gross anatomy knowledge while treating the patients.

**Course Code:** -O102

**Title of the Course:** Physiology

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
4	0	0	4

**Course Outcomes (COs)**

**CO1:** Understand the basis of normal human physiology with special emphasis on the functioning of the cardiovascular, musculoskeletal and nervous systems.

**CO2:** To understand the functional mechanisms of each organ system.

**CO3:** Understand how abnormal Physiology affects human function and dysfunction of the human body.

**CO4:** To understand interaction and integration of different organ systems in health and diseases.

**Course Code:-O102-B**

**Title of the Course:** Physiology (Pr)

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
0	0	4	2

**Course Outcomes (COs)**

**CO1:** Understand the basis of normal human physiology with special emphasis on the functioning of the cardiovascular, musculoskeletal and nervous systems.

**CO2:** To understand the functional mechanisms of each organ system.

**CO3:** Understand how abnormal Physiology affects human function and dysfunction of the human body.

**CO4:** To understand interaction and integration of different organ systems in health and diseases.

**Course Code:-O103**

**Title of the Course:** Basic Quantum Cranial Osteopathy

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
5	0	0	5

**Course Outcomes (COs)**

**CO1:** To provide the palpation skills needed to relate with the physiologic and non-physiologic expressions of the cranial mechanism.

**CO2:** Student will assess the precision and objectification of an educational model in cranial osteopathy.

**CO3:** To acquaint the student with the osteopathic understanding of the cranial mechanics.

**Course Code:-O103-C**

**Title of the Course:** Basic Quantum Cranial Osteopathy (Pr)

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
0	0	4	2

**Course Outcomes (COs)**

**CO1:** To provide the palpation skills needed to relate with the physiologic and non-physiologic expressions of the cranial mechanism.

**CO2:** Student will assess the precision and objectification of an educational model in cranial osteopathy.

**CO3:** To acquaint the student with the osteopathic understanding of the cranial mechanics.

**Course Code:-O104**

**Title of the Course:** Basic Quantum Visceral Osteopathy

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>

5	0	0	5
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**Course Outcomes (COs)**

**CO1:** To understand and assimilate the importance of the diaphragm as a central structure in the osteopathic approach.

**CO2:** To diagnose and treat the diaphragm in its different dysfunctions.

**CO3:** To acquaint the student with the physiological principles and technical principles of mobilisations, functional techniques, muscle energy techniques, and listening techniques.

**Course Code:-O104-D**

**Title of the Course:** Basic Quantum Visceral Osteopathy (Pr)

L	T	P	C
0	0	4	2

**Course Outcomes (COs)**

**CO1:** To understand and assimilate the importance of the diaphragm as a central structure in the osteopathic approach.

**CO2:** To diagnose and treat the diaphragm in its different dysfunctions.

**CO3:** To acquaint the student with the physiological principles and technical principles of mobilisations, functional techniques, muscle energy techniques, and listening techniques.

**Course Code:-O105**

**Title of the Course:** Biomechanics & Kinesiology

L	T	P	C
4	0	0	4

**Course Outcomes (COs)**

**CO1:** Acquire the knowledge of kinetics and kinematics.

**CO2:** Recall axis and plane of spine and extremities

**CO3:** Apply the analytic methods to specific example of normal human motor performance.

**CO4:** Use these methods for evaluation and treatment of disorders of the musculoskeletal system.

**Course Code:-O105-E**

**Title of the Course:** Biomechanics & Kinesiology (Pr)

L	T	P	C
0	0	4	2

**Course Outcomes (COs)**

**CO1:** Acquire the knowledge of kinetics and kinematics.

**CO2:** Recall axis and plane of spine and extremities

**CO3:** Apply the analytic methods to specific example of normal human motor performance.

**CO4:** Use these methods for evaluation and treatment of disorders of the musculoskeletal system.

## SEM -2<sup>nd</sup>

**Course Code:-** O201

**Title of the Course:** Radiology

L	T	P	C
4	0	0	4

### Course Outcomes (COs)

**CO1:** To acquaint the student with the various sub-specialities of radiology.

**CO2:** To enable the student to interpret diagnostic imaging of structures of the musculoskeletal system, the nervous system, the gastrointestinal tract, the respiratory system, the urogenital system, and the circulatory system.

**CO3:** Students will effectively analyze/critique radiographic images for diagnostic quality.

**Course Code:-** O202

**Title of the Course:** Clinical Evaluation Assessment in Multiple Systems

L	T	P	C
5	0	0	5

### Course Outcomes (COs)

**CO1:** To understand the restrictions that may be present in the facial mechanism by their symptomatology.

**CO2:** To understand the relation between dysfunctions of the bones of the face and Sphenobasilar synchondrosis dysfunctions.

**CO3:** To diagnose and treat cranial dysfunctions involving the bones of the face.

**Course Code :-** O203

**Title of the Course:** Osteopathic Manipulation (Spine)

L	T	P	C
4	0	0	4

### Course Outcomes (COs):

**CO1:** To review the anatomical, physiological and osteopathic relations of all the structures learned along the program.

**CO2:** To explore the different possibilities in osteopathy of connecting the structures studied under the musculoskeletal, visceral and cranial papers.

**CO3:** To provide a platform where students can understand in a practical way the implications of these connections in diagnosis and treatment.

**CO4:** To broaden the understanding of the osteopathic principles and philosophy in the light of the practice.

**Course Code:-** O203-A

**Title of the Course:** Osteopathic Manipulation (Spine) (Pr)

L	T	P	C
0	0	4	2

**Course Outcomes COs):**

**CO1:** To review the anatomical, physiological and osteopathic relations of all the structures learned along the program.

**CO2:** To explore the different possibilities in osteopathy of connecting the structures studied under the musculoskeletal, visceral and cranial papers.

**CO3:** To provide a platform where students can understand in a practical way the implications of these connections in diagnosis and treatment.

**CO4:** To broaden the understanding of the osteopathic principles and philosophy in the light of the practice.

**Course Code:-** O204

**Title of the Course:** Quantum Muscle Energy Technique

L	T	P	C
4	0	0	4

**Course Outcomes (COs):**

**CO1:** It provides an alternative manual approach to address sacroiliac and iliosacral dysfunctions.

**CO2:** The Course will explore the rationale and methodology for using different models of MET, in their role in managing a variety of forms of somatic dysfunction.

**CO3:** Refine palpation skills to locate relevant regional musculoskeletal structures for the purpose of evaluating and treating dysfunctions.

**Course Code:-** O204-B

**Title of the Course:** Quantum Muscle Energy Technique (Pr)

L	T	P	C
0	0	4	2

**Course Outcomes (COs):**

**CO1:** It provides an alternative manual approach to address sacroiliac and iliosacral dysfunctions.

**CO2:** The Course will explore the rationale and methodology for using different models of MET, in their role in managing a variety of forms of somatic dysfunction.

**CO3:** Refine palpation skills to locate relevant regional musculoskeletal structures for the purpose of evaluating and treating dysfunctions.

**Course Code:-** O205

**Title of the Course:** Quantum Strain Counterstrain

L	T	P	C
4	0	0	4

**Course Outcomes (COs)**

**CO1:** To acquaint the student with an understanding of the development of the techniques known as high velocity low amplitude, strain-counterstrain, deep transverse massage and trigger points.

**CO2:** To acquaint the student with the physiology behind these families of techniques, their scope of application, limitations and contraindications.

**CO3:** To provide the student with an introductory experience of some techniques under each of these categories, that will then be developed under the other musculoskeletal units.

**Course Code:-** O205 -C

**Title of the Course:** Quantum Strain Counterstrain (Pr)

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
0	0	4	2

**Course Outcomes (COs)**

**CO1:** To acquaint the student with an understanding of the development of the techniques known as high velocity low amplitude, strain-counterstrain, deep transverse massage and trigger points.

**CO2:** To acquaint the student with the physiology behind these families of techniques, their scope of application, limitations and contraindications.

**CO3:** To provide the student with an introductory experience of some techniques under each of these categories, that will then be developed under the other musculoskeletal units.

**Course Code:-**O206

**Title of the Course:-** Biostatistics

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
4	0	0	4

**Course Outcomes (COs):**

**CO1:** Distinguish different types of data and sampling techniques.

**CO2:** Summarize, Organize and display quantitative data.

**CO3:** Calculate and interpret measures of central tendency and variability in statistical data.

### **SEM -3<sup>rd</sup> (Lateral Entry)**

**Course Code: -** O301

**Title of the Course: -** Osteopathic Manipulation (Extremity)

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
5	0	0	5

**Course Outcomes (COs)**

**CO1:** Intended to integrate the diagnosis and treatment of somatic dysfunction into the broad spectrum of medical practice.

**CO2:** Provide an in-depth understanding of the relevance of somatic dysfunction and its appropriate treatment in the clinical management of patients from infants and children to end-of-life.

**CO3:** It will expand the student's osteopathic knowledge base through the application of new and previously learned techniques into specific disease examples

**Course Code: -** O301-A

**Title of the Course:-** Osteopathic Manipulation (Extremity) (Pr)

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
0	0	4	2

**Course Outcomes (COs)**

**CO1:** Intended to integrate the diagnosis and treatment of somatic dysfunction into the broad spectrum of medical practice.

**CO2:** Provide an in-depth understanding of the relevance of somatic dysfunction and its appropriate treatment in the clinical management of patients from infants and children to end-of-life.

**CO3:** It will expand the student's osteopathic knowledge base through the application of new and previously learned techniques into specific disease examples

**Course Code:** - O302

**Title of the Course:-** Research Methodology

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
4	0	0	4

**Course Outcomes (COs)**

**CO1:** Understand some basic concepts of research and its methodologies

**CO2:** Propose the required numerical skills necessary to carry out research.

**CO3:** Organize and conduct research (advanced project) in a more appropriate manner.

**Course Code:** - O303

**Title of the Course:-** Quantum Lymphatic Activation

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
5	0	0	5

**Course Outcomes (COs)**

**CO1:** To acquaint the student with the physiological principles and technical principles of mobilizations, functional techniques, muscle energy techniques, and listening techniques.

**CO2:** To acquaint the students with the history of osteopathy and the development of its philosophy and principles.

**CO3:** To understand the restrictions that may be present in the facial mechanism by their symptomatology.

**Course Code:** - O303-B

**Title of the Course:-** Quantum Lymphatic Activation (Pr)

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
0	0	4	2

**Course Outcomes (COs)**

**CO1:** To acquaint the student with the physiological principles and technical principles of mobilisations, functional techniques, muscle energy techniques, and listening techniques.

**CO2:** To acquaint the students with the history of osteopathy and the development of its philosophy and principles.

**CO3:** To understand the restrictions that may be present in the facial mechanism by their symptomatology.

**Course Code:** - O304

**Title of the Course:-** Quantum Myofascial Release

L	T	P	C
5	0	0	5

**Course Outcomes (COs):**

**CO1:** To acquaint the students with the history of osteopathy and the development of its philosophy and principles.

**CO2:** To introduce the student into the possibilities of palpation as a diagnostic and treatment resource.

**CO3:** To acquaint the student with the physiological principles and technical principles of mobilisations, functional techniques, muscle energy techniques, and listening techniques.

**Course Code:** - O304

**Title of the Course:-** Quantum Myofascial Release (Pr)

L	T	P	C
0	0	4	2

**Course Outcomes (COs):**

**CO1:** To acquaint the students with the history of osteopathy and the development of its philosophy and principles.

**CO2:** To introduce the student into the possibilities of palpation as a diagnostic and treatment resource.

**CO3:** To acquaint the student with the physiological principles and technical principles of mobilisations, functional techniques, muscle energy techniques, and listening techniques.

**Course Code:** - O305

**Title of the Course:-** Quantum Advance Cranial Osteopathy

L	T	P	C
5	0	0	5

**Course Outcomes (COs):**

**CO1:** To acquaint the student with the osteopathic understanding of the bones of the face complex.

**CO2:** To understand the restrictions that may be present in the facial mechanism by their symptomatology.

**CO3:** To understand the relation between dysfunctions of the bones of the face and sphenobasilar synchondrosis dysfunctions.

**CO4:** To diagnose and treat cranial dysfunctions involving the bones of the face.

**Course Code:** - O305-D

**Title of the Course:-** Quantum Advance Cranial Osteopathy (Pr)

L	T	P	C
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0	0	4	2
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**Course Outcomes (COs):**

**CO1:** To acquaint the student with the osteopathic understanding of the bones of the face complex.

**CO2:** To understand the restrictions that may be present in the facial mechanism by their symptomatology.

**CO3:** To understand the relation between dysfunctions of the bones of the face and sphenobasilar synchondrosis dysfunctions.

**CO4:** To diagnose and treat cranial dysfunctions involving the bones of the face.

**Course Code:** - O306

**Title of the Course:** - Quantum Advance Visceral Osteopathy

L	T	P	C
5	0	0	5

**Course Outcomes (COs):**

**CO1:** To acquaint the student with the history of visceral osteopathy.

**CO2:** To acquaint the student with the scope and applications of osteopathic treatment in the viscera.

**CO3:** To offer an understanding of the circulatory model applied to the treatment of the viscera, along with a set of circulatory techniques.

**Course Code:** - O306 -E

**Title of the Course:** - Quantum Advance Visceral Osteopathy (Pr)

L	T	P	C
0	0	4	2

**Course Outcomes (COs):**

**CO1:** To acquaint the student with the history of visceral osteopathy.

**CO2:** To acquaint the student with the scope and applications of osteopathic treatment in the viscera.

**CO3:** To offer an understanding of the circulatory model applied to the treatment of the viscera, along with a set of circulatory techniques.

## SEM -4TH

**Course Code:** - O401

**Title of the Course:-** Quantum Integration

L	T	P	C
5	0	0	5

**Course Outcomes (COs)**

**CO1:** To review the anatomical, physiological and osteopathic relations of all the structures learned along the program.

**CO2:** To explore the different possibilities in osteopathy of connecting the structures studied under the musculoskeletal, visceral and cranial papers.

**CO3:** To provide a platform where students can understand in a practical way the implications of these connections in diagnosis and treatment.

**CO4:** To broaden the understanding of the osteopathic principles and philosophy in the light of the practice

**Course Code:** - O401-A

**Title of the Course:-** Quantum Integration (Pr)

L	T	P	C
0	0	4	2

**Course Outcomes (COs)**

**CO1:** To review the anatomical, physiological and osteopathic relations of all the structures learned along the program.

**CO2:** To explore the different possibilities in osteopathy of connecting the structures studied under the musculoskeletal, visceral and cranial papers.

**CO3:** To provide a platform where students can understand in a practical way the implications of these connections in diagnosis and treatment.

**CO4:** To broaden the understanding of the osteopathic principles and philosophy in the light of the practice

**Course Code:** - O402

**Title of the Course:-** Quantum Ligament Activation

L	T	P	C
5	0	0	5

**Course Outcomes (COs):**

**CO1:** Student will learn co-activation as well as anterior and posterior cruciate ligament with the motor unit activation.

**CO2:** To broaden the understanding of the osteopathic principles and philosophy in the light of the practice.

**CO3:** To acquaint the student with the scope and applications of osteopathic treatment in the viscera.

**Course Code:** - O402- B

**Title of the Course:-** Quantum Ligament Activation (Pr)

L	T	P	C
0	0	4	2

**Course Outcomes (COs):**

**CO1:** Student will learn co-activation as well as anterior and posterior cruciate ligament with the motor unit activation.

**CO2:** To broaden the understanding of the osteopathic principles and philosophy in the light of the practice.

**CO3:** To acquaint the student with the scope and applications of osteopathic treatment in the viscera.