



Tip Fakültesi



Marmara University - Eastern Mediterranean University

International Joint Medical Program

Year Two

Introduction to Clinical Skills

Course Guidebook

Contents

1. Basic Clinical Skills (ICS-2 BCS)
 - History Taking and Introduction to the Physical Examination (HTx)
 - Clinical Skills Laboratory (CSL)
2. Human in Medicine (ICS-2 HIM)
 - Social Concepts (SC)
 - Ethics (Eth)
 - Arts and Humanities (AHum)
3. Evidence Based Medicine (EBM)

2025-2026 Academic Year

**General information about the ‘Introduction to Clinical Skills (ICS)’
course program within the MU-EMU International Joint Medical Program
curriculum**

ICS courses, which take an important part in our curriculum, are given in the pre-clinical phase. The basic contents of these multi-component courses are given in the table below.

ICS-1			ICS-2			ICS-3		
MDN1707 3 credits	MDN1705 3 credits	MDN1706 3 credits	MDN2705 3 credits	MDN2706 3 credits	MDN2707 3 credits	MDN3705 3 credits	MDN3706 3 credits	MDN3707 2 credits
Clinical Skills Laboratory & Introduction to First Aid	Communication Skills & Introduction to Medical Interview	Introduction to Student Research and Computer Skills	Basic Clinical Skills	Human in Medicine	Evidence Based Medicine	Basic Medical Practice	Clinical Skills Laboratory	Student Research Activity
First aid, hand washing, glove wearing, CPR	Effective communication, active listening, group dynamics	Theme: “Explore your universe”	History taking, aspiration, injection, suturing, physical examination	Social concepts, ethics, art and humanities	Theme: “Health and community”	Advanced communication skills, Hospital visit	Physical examination of systems	Theme: “Patients and diseases”

1. Basic Clinical Skills (ICS-2 BCS)

Course Outcomes	Teaching Methods
• Demonstrates how to take patient history and explains the patient interview methods. • Teaches basic physical examination techniques and examination for musculoskeletal disorders. • Teaches basic clinical practices, such as aspiration from ampule, injection (intramuscular and intravenous), skin suturing.	• Video presentation. • Tutor presentations. • Demonstration of tutors, and student practice sessions with manikin and roleplay.

The aim of the Introduction to Clinical Skills-2-Basic Clinical Skills Program is to introduce medical students to the process of performing history taking and introduction to physical examination and clinical skills. You will be having interviews with the standard patients to help you learn to communicate better with the patient, additionally, you will be having polyclinic visits at the state hospital. Furthermore, clinical skills include the procedure of working on models. The course schedule is longitudinal and given in each semester.

The goals of this course include:

- To provide clinical context to the basic science curriculum.
- Procedural skills such as injections, suturing, etc.
- To acquire and demonstrate attitudes necessary for the achievement of high standards of medical practice in relation to both the provision of care of individuals and populations.
- To acquire the skills of independent and self-directed learning and a commitment towards the maintenance of clinical competence through life-long learning, professional and personal development.
- To acquire basic procedural skills by utilizing Clinical Skills Laboratory with a competency-based approach and in conformity with humanistic medical education principles.
- To introduce students to the History Taking and Physical Examination of a patient (combining with clinical skills program and simulated patient interviews).

History Taking and Introduction to the Physical Examination (HTx) Plan

HT	Communication Skills and Introduction to the Medical Interview: Comprehensive HT - theoretical	Theoretical
HT	Difficult patient/issue Pediatric HT - theoretical	Theoretical
HT1	Learning Objectives Medical students will be able to: - Identify a chief complaint (CC) and gather an accurate history of present illness (HPI) - Use open-ended questions - Describe non-verbal communication - Apply a structure for reflection, self-assessment and giving feedback Session pre-work - <i>All students should come to the session prepare to play the role of doctor evaluating or patient with one of the following complaints:</i> - <i>Headache, Cough, Abdominal pain, Fever, Chest pain</i>	Peer pairs Medical Interview Self-assessment Feedback Discussion
HT2	Learning Objectives Medical students will be able to: - Identify a CC, and gather an accurate HPI - Obtain a PMHx, PSurgHx, Medications, Allergies, FHx - Apply a structure for reflection, self-assessment and giving feedback Session pre-work - <i>All students should come to the session prepare to play the role of doctor evaluating or patient with one of the following complaints:</i> - <i>Sore throat, Fatigue, Vomiting, Diarrhea, Fatigue</i>	Peer pairs Medical Interview Self-assessment Feedback Discussion
HT3	Learning Objectives Medical students will be able to: - Identify a CC and gather an accurate HPI, PMHx, PSurgHx, Medications, Allergies, FHx - Obtain a SHx (to include habits such as smoking, alcohol, drug use, occupation, diet, exercise, finances, religion) and ROS - Use empathic statements - Apply a structure for reflection, self-assessment, and giving feedback Session pre-work - All students should come to the session prepare to play the role of doctor evaluating or patient with one of the following complaints: Rash, Dysuria	Standardized patient Medical Interview Self-assessment Feedback Discussion
HT	Introduction to physical exam- theoretical	Theoretical

HT4	Learning Objectives Medical students will be able to - Identify a CC and construct an accurate HPI, PMHx, PSurgHx, Medications, Allergies, FHx, ROS - Give an oral presentation of the medical history - Write a medical note - Integrate data obtained from the medical history and consider diagnostic studies - Apply a structure for reflection, self-assessment, and giving feedback	Standardized patient Medical Interview Self-assessment Feedback Discussion
HT5	Learning Objectives Medical students will be able to perform basic physical examination techniques including inspection, palpation, percussion and auscultation	
HT EXAM	HT exam with SP (interview 50%+written exam 50%)	

Clinical Skills Laboratory (CSL) Plan

CSL-1
Learning Objectives Describe the different routes of medication administration Aspirate from ampoule and flacon List the parenteral medication administration routes Describe and perform intramuscular medication administration Describe and perform subcutaneous medication administration Describe and perform intravenous medication administration
CSL-2
Learning Objectives List the characteristics of suture materials Describe skin suturing Describe wound repairing Apply local anesthesia Perform skin suturing Perform wound closure
CSL- Basic physical examination techniques and examination for musculoskeletal disorders

Learning Objectives to be able to assess data related to the musculoskeletal system and its function to be able to differentiate normal from abnormal findings in physical assessment of the musculoskeletal system
CSL- Review session
CSL EXAM- Practical exam.
CSL- Respiratory system
Tutor Presentation: RS examination adult -Pediatric respiratory system examination
Learning Objectives Audios visualize the complete physical examination of the respiratory system Discuss fundamental skills required for physical examination of the respiratory system/ normal and abnormal breath sounds PRACTICE: Revise basic anatomic landmarks of the respiratory system Identify normal findings of the chest Explain the technique for palpation of the chest Explain the technique for percussion of the chest Explain the technique for auscultation of the chest Identify normal breath sounds and pathologic breath sounds including crackles, wheezes, gurgles, and stridor.

Committee	Date	Lecture	Duration	Type*	Duration per student	Instructor
Y2C1	WEEK 3	ICS-2 BCS: IM injection and IV Cannulation	4	P	2	Dr. Amber Eker, Dr. Zehra Gültekin
	WEEK 4	ICS-2 BCS: Suturing	4	P	2	Dr. Amber Eker, Dr. Zehra Gültekin
Y2C2	WEEK 3	ICS-BSC: History Taking	4	T	4	Dr. Ayse Atasoylu
	WEEK 3	ICS-BSC: Introduction to Physical Examination (IPE)	4	T	4	Dr. Ayse Atasoylu
	WEEK 4	ICS-2 BCS: Pediatric History Taking	2	T	2	Dr. Nilüfer Güzoğlu
	WEEK 4	ICS-2 BCS: Geriatric History taking	2	T	2	Dr. Amber Eker Bakkaloğlu
Y2C3	WEEK 3	ICS-2 BSC: Simulated Patient Feedback session	2	P	2	Dr. Ayse Atasoylu, Dr. Amber Eker
	WEEK 4	ICS-2 BCS: History Taking and IPE	8	P	4	Dr. Ayse Atasoylu, Dr. Amber Eker, Dr. Zehra Gültekin
Y2C4	WEEK 2	ICS-2 BCS: History taking- Written Exam	1	E		-
		ICS-2 BCS: History taking- Practical Exam	8	E		Dr. Ayse Atasoylu, Dr. Amber Eker, Dr. Zehra Gültekin

	WEEK 4	ICS-2 BCS: Musculoskeletal System Examination	4	T	4	Dr. Baris Sari
		ICS-2 BCS: Musculoskeletal System Examination	4	P	2	Dr. Barış Sarı, Dr. Amber Eker, Dr. Zehra Gültekin
	WEEK 5	Policlinic visit reflection session and evidence-based medicine case discussion	2	P	2	Dr. Zehra Gültekin, Dr. Amber Eker
Y2C5	WEEK 2	ICS-2 BCS: Respiratory System Examination	4	T	4	Dr. Zehra Gültekin
	WEEK 3	ICS-2 BCS: Respiratory System Examination	4	P	2	Dr. Zehra Gültekin, Dr. Amber Eker
	WEEK 6	ICS-2 BCS: OSCE Exam (suturing, injection, canulation, musculoskeletal, IPE)	8	E		Dr. Ayse Atasoylu, Dr. Amber Eker, Dr. Zehra Gültekin

*T: theoretical lecture; P: practical lecture; E: exam.

** OSCE: Objective Structured Clinical Examination.

MDN2705 Assessment

- 60% History taking
 - 60% Practice exam
 - 90% Performance in the exam
 - 10% History Taking Practice Exam Patient File
 - 30% Written exam
 - 5% Simulated Patient Practice Video
 - 5% Polyclinic Visit Experience form
- 40% CSL
 - 25% Musculoskeletal examination/GALS
 - 25% IM injection and aspirating from ampoules
 - 25% IV canulation
 - 25% Suturing

Academic Staff

Dr. Nilüfer Güzoğlu

Dr. Amber Eker Bakkaloğlu

Dr. Halil Eren Sakallı

Dr. Barış Sarı

Dr. Ayşe Atasoylu

Dr. Zehra Gültekin

Dr. Osman Ebeler

The checklists used in practical laboratories are as follows.

PATIENT INTERVIEW CHECKLIST

OPENNING

Initial Greeting

- verbal introduction
- shake hands
- address patient as Mr and Mrs

Put patient at ease

- attends to patient's comfort and privacy
- a brief chat
- assessment of patients overall appearance

Identification of patient

- Date of birth, sex
- Reliability

FACILITATION SKILLS

- Eye contact
- Open posture
- Conveys interest and attentiveness
- (nods, mmhmm, repeating patient's last statement)

INFORMATION GATHERING

Questioning:

- uses open to closed cone
- problem survey
- (asks "what else" until all major concerns are expressed)
- without interrupting and listens carefully
- maintains a chronological account
- avoid multiple and leading questions
- avoid the use of jargon/technical language

--segment summaries

- clarification

CLOSING

- encourage patient's questions
- specifies follow-up (if necessary)

Outline Of Medical History

Chief Complaint

History of Present Illness

(a chronological account)

Characteristics of Symptoms

(SOCRATES)

-Situation (setting) of onset

-Location

-Radiation

-Quality

-Severity/intensity

-Timing (onset, duration)

Sudden, gradual

-Frequency/pattern

-Exacerbating/ Relieving factors

Associated manifestations

Past experience with symptoms

Previous similar complaints

Patient's explanation of complaint

System Review

(Related Chief Complaint)

Past Medical/Surgical History

(systemic questioning previous illnesses)

-Previous adult Illnesses

Childhood illnesses

-Hospital admissions

-Surgeries, injuries

-Medications (drug history)

-Current medications, prescriptions, over the counter

-Allergies

-Vaccinations

-Obstetric/GYM

Birth control

Menstrual periods

Family History

-Current health of parents, siblings, children

-Significant illnesses

-Deaths: age at death

Social History

-Marital status

-employment

-tobacco

-alcohol

-living arrangements

-sexual history (if necessary)

All Systems Review (for only comprehensive examination)

Ref.: Guide to Taking a Patient History, Patient Interview Guide, Thomas Secrest (2009)

CLINICAL SKILLS LABORATORY

NAME:

NUMBER:

Aspirating (withdrawing medicine) from ampoules

1) Puts the needle on the syringe		
2) Pulls and pushes the piston of the syringe 2-3 times		
3) Removes the liquid from the neck and ampoule by flicking it		
4) Files around the neck of the ampoule		
5) Protects his/her fingers with gauze if ampoules is made of glass		
6) Carefully breaks off the top of the ampoule (for a plastic ampoule twist the top)		
7) Aspirates the fluid from the ampoule		
8) Removes any air from the Syringe		
9) Cleans up; dispose of working needle safely; washes hands		
Total		

CLINICAL SKILLS LABORATORY

NAME:

NUMBER:

Intermuscular Injection

1) Introduces self and explain the procedure		
2) Selects a preferred site for injection and locates site correctly		
3) Palpates skin for induration or tenderness		
4) Cleans injection site with alcohol swab by circling from the center of this site outward. Allow the site to dry before administering the injection		
5) Removes the needle cap		
6) With non-dominant hand, stretches skin taut between thumb and index finger		
7) Holding the syringe between thumb and fingers of the dominant hand inserts the needle at 90° angle to the skin surface		
8) Stabilizes syringe and aspirates by pulling back on the plunger		
9) Still stabilizing syringe, uses thumb or index finger of non-dominant hand, presses plunger slowly to inject the medication (5 to 10 seconds per mL)		
10) Removes the needle smoothly along the line of insertion		
11) Gently massages site with gauze pad		
Total		

BUTTOCK (GLUTEUS MEDIUS)

FIND THE TROCHANTER. IT IS THE KNOBBY TOP PORTION OF THE LONG BONE IN YOUR UPPER LEG (FEMUR). IT IS THE SIZE OF A GOLF BALL.

FIND THE POSTERIOR ILIAC CREST. MANY PEOPLE HAVE "DIMPLES" OVER THIS BONE. THE NURSE WILL HELP YOU FIND THE BONE LANDMARKS.

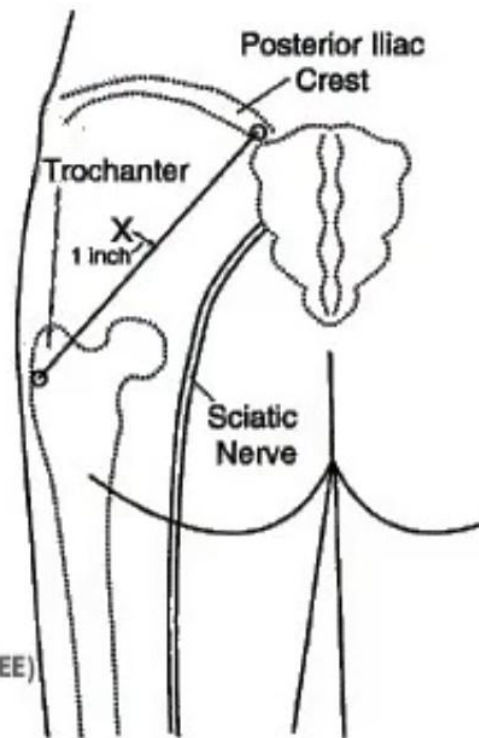
DRAW AN IMAGINARY LINE BETWEEN THE TWO BONES.

AFTER LOCATING THE CENTER OF THE IMAGINARY LINE, FIND A POINT ONE INCH TOWARD YOUR HEAD. THIS IS WHERE (X) YOU WILL PUT THE NEEDLE IN.

STRETCH THE SKIN TIGHT.

HOLD THE SYRINGE LIKE A PENCIL OR DART. INSERT THE NEEDLE AT RIGHT ANGLE TO YOUR SKIN (90 DEGREE)

YOU MAY GIVE UP TO 3 ML. (CC) OF FLUID IN THIS SITE.



HIP (VENTROGLUTEAL)

FIND THE TROCHANTER. IT IS THE KNOBBY TOP PORTION OF THE LONG BONE IN YOUR UPPER LEG (FEMUR). IT IS ABOUT THE SIZE OF A GOLF BALL.

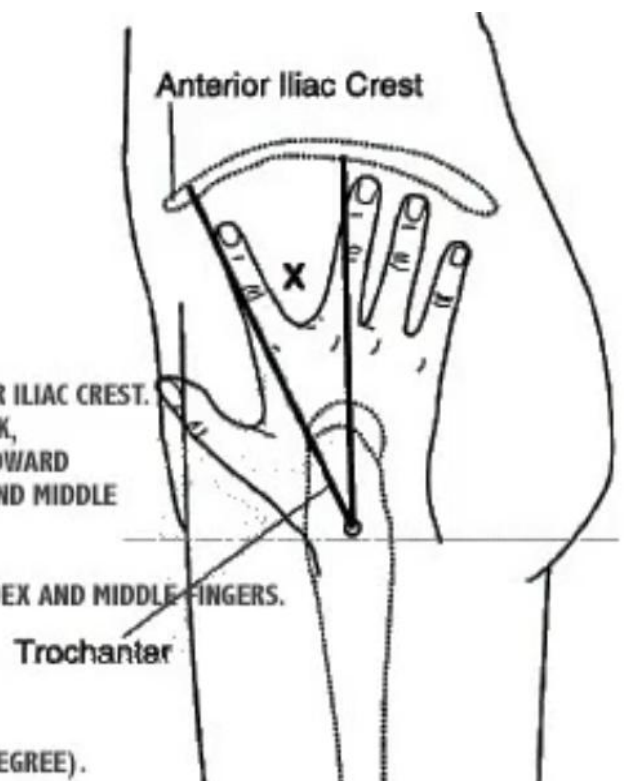
FIND THE ANTERIOR ILIAC CREST. THE NURSE WILL HELP YOU FIND THE BONE LANDMARKS.

PLACE THE PALM OF YOUR HAND OVER THE TROCHANTER. POINT THE FIRST OR INDEX FINGER TOWARD THE ANTERIOR ILIAC CREST. SPREAD THE SECOND OR MIDDLE FINGER TOWARD THE BACK, MAKING A 'V'. THE THUMB SHOULD ALWAYS BE POINTED TOWARD THE FRONT OF THE LEG. ALWAYS USE THE INDEX FINGER AND MIDDLE FINGER TO MAKE THE 'V'.

GIVE THE INJECTION BETWEEN THE KNUCKLES ON YOUR INDEX AND MIDDLE FINGERS.

STRETCH THE SKIN TIGHT.

HOLD THE SYRINGE LIKE A PENCIL OR DART. INSERT THE NEEDLE AT A RIGHT ANGLE TO THE SKIN (90 DEGREE).



CLINICAL SKILLS LABORATORY

NAME:

NUMBER:

Intravenous Injection

1. Introduces her/himself to the patient, Explains the procedure.		
2. Applies tourniquet and looks for a suitable vein.		
3. Cleans injection site with alcohol swab by circling from the center of the site outwards. Allow the site to dry before administering the injection.		
4. Sterilizes the vein with non-dominant hand by pulling the skin taut in the longitudinal direction of the vein.		
5. Enters the vein swiftly at 30-degree angle or less, and continues to introduce the needle along the vein at the easiest angle of entry.		
6. Punctures the skin and move the needle slightly into the vein (3-5mm).		
7. Holds the syringe and needle steady.		
8. Aspirates. If blood appears holds the syringe steady.		
9. Loosens tourniquet.		
10. Injects (very) slowly. Checks for pain, swelling, hematoma; if in doubt whether you are still in the vein aspirate again!		
11. Withdraws needle swiftly. Presses sterile cotton wool onto the opening. Secures with adhesive tape.		
12. Cleans up; disposes of waste safely; wash your hands		
Total		

CLINICAL SKILLS LABORATORY

NAME:

NUMBER:

Intravenous cannulation

1. Wash hands and wear non-sterile gloves (as the procedure will be performed using aseptic non touch technique).		
2. Remove the cannula sheath and prepare it: •Open the cannula wings •Slightly withdraw and replace the needle – this will make it glide easier when cannulating •Unscrew the cap at the back of the cannula and place upright in the tray (if the cannula is ported)		
3. Secure the vein with your non-dominant hand from below by gently pulling on the skin distal to the insertion site and warn the patient of a sharp scratch.		
4. Insert the cannula directly above the vein, through the skin (at an angle of 10-30° with the bevel facing upwards)		
5. Observe for flashback in the cannula chamber.		
6. Decrease the angle between the needle and the skin, then advance the needle a further 2mm after flashback to ensure it's within the vein's lumen.		
7. Partially withdraw the introducer needle (ensuring the needle end is within the plastic tubing of the cannula).		
8. Carefully advance the cannula into the vein fully.		
9. Release the tourniquet and place some sterile gauze directly underneath the cannula hub.		
10. Apply pressure to the proximal vein close to the tip of the cannula to reduce bleeding and gently pull the introducer needle backwards whilst holding the cannula in position until it is completely removed. Later, connect a luer lock cap or primed extension set to the cannula hub.		
11. Dispose of the introducer needle immediately into a sharp's container		
12. Apply adhesive strips to secure the cannula wings to the skin (do not obscure the insertion site with these, as this needs to remain clearly visible to allow early detection of phlebitis)		
Total		

Identification of a suitable vein (Checklist)

1. Position the patient's arm in a comfortable extended position that provides adequate exposure of the planned area for cannulation
2. Inspect the arm for suitable vein (it should ideally be visible without applying the tourniquet)
 - If you are planning to use the cannula for IV fluids or antibiotics you should select a site that is least restrictive for the patient (preferably distally on the arms)
 - You should also ask the patient if they have a preference as to which arm should be cannulated
3. Apply the tourniquet – approximately 4-5 finger widths above the planned puncture site
4. Palpate the vein:
 - Go for a vein that feels “springy”
 - It should ideally be straight to best accommodate the cannula
 - Tapping a vein and asking the patient to repeatedly clench their fist can make the vein easier to visualize and feel
 - It is preferable to use the patient's non-dominant arm and to avoid areas near the elbow and wrist joints (to reduce the likelihood of dislodgement as a result of the patient's movement)

Things to avoid when cannulating:

- You should avoid areas where two veins are joining as valves are often present
 - Pre-existing medical conditions may prevent particular limbs from being used (e.g. arterio-venous fistula, lymphoedema, previous mastectomy)
 - Avoid areas of broken, bruised or infected skin (cellulitis)
5. Once you have identified a suitable vein clean the site with an alcohol swab for 30 seconds and then allow to dry completely over 30 seconds:
 - You should start cleaning from the center of the cannulation site and work outwards to cover an area of 5cm or more
 - DO NOT touch the cleaned site afterwards at any point, otherwise the cleaning procedure will need to be repeated prior to cannulation

Inspect for a suitable vein

Apply tourniquet

Palpate the vein

Clean the site for 30 seconds and allow to dry

CLINICAL SKILLS LABORATORY

NAME:

NUMBER:

Skin Suturing

1. Drapes the wound with a sterile fenestrated drape.		
2. Applies local anesthesia to the edges of the wound subcutaneously.		
3. Grasps needle 2/3 from tip of the needle holder (not finger).		
4. Holds the small-toothed penset in the first three fingers as one would hold a pen.		
5. Holds the needle-holder In the palm or by partially inserting the thumb and ring finger into the loops of the needle holder and place the index finger to maintain stability.		
6. Places the first suture to enhance good approximation (in middle of wound)		
7. Grasp and slightly evert the skin edge with small toothed penset.		
8. Rotates dominant hand into pronation so that the needle pierce the skin at 90-degrees angle.		
9. Penetrates dermis and epidermis 3-4 mm from wound edge.		
10. Drives the needle in through the full thickness of the skin by rotating the needle holder (supinating).		
11. Pulls the needle through wound with needle holder whilst supporting skin with forceps.		
12. Rotates dominant hand again to penetrate the other edge of the wound.		
13. Pull suture filament through wound so that 3cm tail remains on entry side		
14. Holds the needle holder parallel to the wound.		
15. Wraps suture OVER needle holder twice times (into the "L") [fig g].		
16. Rotates needle holder 90 degrees, grasp 3cm tail and pull it to opposite side [knot needs to lie flat].		
17. Repeats process to complete SECOND and THORD THROW.		
18. After final throw, pulls knot to one side of laceration		
19. Cuts suture with scissors, leaving tails of approximately 1 cm.		
20. Removes the drape.		
21. Cleans the wound with saline solution and providone iodine from center to periphery		
22. Covers the wound with sterile gauze and tape		
Total		

Examination of the Chest and Lungs Checklist

Equipment Needed

- A Stethoscope

General Considerations

- The patient **must** be properly undressed and gowned for this examination.
- Ideally the patient should be sitting on the end of an exam table.
- The examination room **must** be quiet to perform adequate percussion and auscultation.
- Observe the patient for general signs of respiratory disease (finger clubbing, cyanosis, air hunger, etc.).
- Try to visualize the underlying anatomy as you examine the patient.

Inspection

1. Observe the rate, rhythm, depth, and effort of breathing. Note whether the expiratory phase is prolonged.
2. Listen for obvious abnormal sounds with breathing such as wheezes.
3. Observe retractions and use of accessory muscles (sternomastoids, abdominals).
4. Observe the chest for asymmetry, deformity, or increased anterior-posterior (AP) diameter.
5. Confirm that the trachea is near the midline?

Palpation

1. Identify any areas of tenderness or deformity by palpating the ribs and sternum.
2. Assess chest expansion and symmetry of the chest by placing your hands on the patient's back, thumbs together at the midline, and ask them to breathe deeply.
3. Check for tactile fremitus.

Percussion

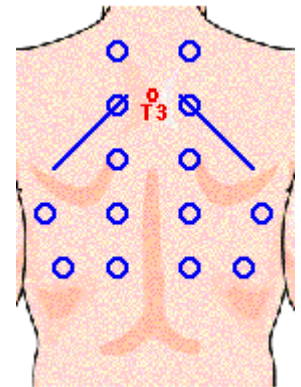
Proper Technique

1. Hyperextend the middle finger of one hand and place the distal interphalangeal joint **firmly** against the patient's chest.
2. With the end (not the pad) of the opposite middle finger, use a quick flick of the wrist to strike the first finger.
3. Categorize what you hear as normal, dull, or hyperresonant.
4. Practice your technique until you can consistently produce a "normal" percussion note on your (presumably normal) partner before you work with patients.



Posterior Chest

1. Percuss from side to side and top to bottom using the pattern shown in the illustration. Omit the areas covered by the scapulae.
2. Compare one side to the other looking for asymmetry.
3. Note the location and quality of the percussion sounds you hear.
4. Find the level of the diaphragmatic dullness on both sides.

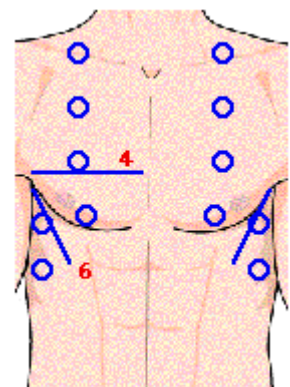


Diaphragmatic Excursion

5. Find the level of the diaphragmatic dullness on both sides.
6. Ask the patient to inspire deeply.
7. The level of dullness (diaphragmatic excursion) should go down 3-5cm **symmetrically**.

Anterior Chest

1. Percuss from side to side and top to bottom using the pattern shown in the illustration.
2. Compare one side to the other looking for asymmetry.
3. Note the location and quality of the percussion sounds you hear.



Interpretation

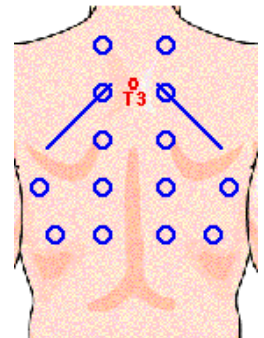
Percussion Notes and Their Meaning	
Stony dull or Dull	Pleural Effusion or Lobar Pneumonia
Normal	Healthy Lung or Bronchitis
Hyperresonant	Emphysema or Pneumothorax

Auscultation

Use the diaphragm of the stethoscope to auscultate breath sounds.

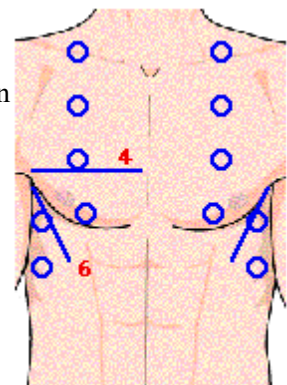
Posterior Chest

1. Auscultate from side to side and top to bottom using the pattern shown in the illustration. Omit the areas covered by the scapulae.
2. Compare one side to the other looking for asymmetry.
3. Note the location and quality of the sounds you hear.



Anterior Chest

1. Auscultate from side to side and top to bottom using the pattern shown in the illustration.
2. Compare one side to the other looking for asymmetry.
3. Note the location and quality of the sounds you hear.



Interpretation

Breath sounds are produced by turbulent air flow. They are categorized by the size of the airways that transmit them to the chest wall (and your stethoscope). The general rule is, the larger the airway, the louder and higher pitched the sound. Vesicular breath sounds are low pitched and normally heard over

most lung fields. Tracheal breath sounds are heard over the trachea. Bronchovesicular and bronchial sounds are heard in between. Inspiration is normally longer than expiration ($I > E$).

Breath sounds are **decreased** when normal lung is displaced by air (emphysema or pneumothorax) or fluid (pleural effusion). Breath sounds **shift from vesicular to bronchial** when there is fluid in the lung itself (pneumonia). Extra sounds that originate in the lungs and airways are referred to as "adventitious" and are always abnormal (but not always significant). (See Table)

Adventitious (Extra) Breath Sounds	
Crackles	These are high pitched, discontinuous sounds similar to the sound produced by rubbing your hair between your fingers. (Also known as Rales)
Wheezes	These are generally high pitched and "musical" in quality. Stridor is an inspiratory wheeze associated with upper airway obstruction (croup).
Rhonchi	These often have a "snoring" or "gurgling" quality. Any extra sound that is not a crackle or a wheeze is probably a rhonchi.

Voice Transmission Tests

These tests are only used in special situations. This part of the physical exam has largely been replaced by the chest x-ray. All these tests become abnormal when the lungs become filled with fluid (referred to as **consolidation**).

Tactile Fremitus

1. Ask the patient to say "ninety-nine" several times in a normal voice.
2. Palpate using the ball of your hand.
3. You should feel the vibrations transmitted through the airways to the lung.
4. Increased tactile fremitus suggests consolidation of the underlying lung tissues or decreased in effusion or fibrosis or lung collapse.
- 5.

Bronchophony

1. Ask the patient to say "ninety-nine" several times in a normal voice.
2. Auscultate several symmetrical areas over each lung.

3. The sounds you hear should be muffled and indistinct. Louder, clearer sounds are called bronchophony.

Whispered Pectoriloquy

1. Ask the patient to whisper "ninety-nine" several times.
2. Auscultate several symmetrical areas over each lung.
3. You should hear only faint sounds or nothing at all. If you hear the sounds clearly this is referred to as whispered pectoriloquy.

Egophony

1. Ask the patient to say "ee" continuously.
2. Auscultate several symmetrical areas over each lung.
3. You should hear a muffled "ee" sound. If you hear an "ay" sound this is referred to as "E -> A" or egophony.

Notes

1. For more information refer to *A Guide to Physical Examination and History Taking, Sixth Edition* by Barbara Bates, published by Lippincott.
2. A prolonged expiratory phase ($E > I$) indicates airway narrowing, as in asthma.
3. AP diameter increases somewhat with age, however, a round or "barrel" chest is often a sign of advanced emphysema.
4. The trachea will deviate to one side in cases of tension pneumothorax.
5. Decreased or asymmetric diaphragmatic excursion may indicate paralysis or emphysema.
6. It has been said that "a peak flow meter is to asthma as a thermometer is to fever." Peak flow measurements are used to gauge severity of asthma attacks and track the disease over time. Ideally new readings are compared to the patient's current "personal best." Readings less than 80% of "best" may indicate a need for additional therapy. Readings less than 50% may indicate an emergency situation.

Increased fremitus indicates **fluid in the lung**. Decreased fremitus indicates sound transmission obstructed by chronic obstructive pulmonary disease (COPD), **fluid outside the lung** (pleural effusion), air outside the lung (pneumothorax).

2. Human in Medicine (ICS-2 HIM)

Social Concepts (SC)

General Information

A twelve-hour-course will be one of the threads of your multi-thread ICP course at the beginning of this year.

It aims to open your minds to *sociological imagination* in order to understand more fully how your actions as a physician may affect the larger society, and how you, yourselves, patients, medical practices, health and illness are shaped by social forces.

Objectives

At the end of this introductory course, you will;

1. be able to grasp social and cultural environment as it affects health and disease, the roles of physicians and the experiences of patients;
2. be more alerted to the social and cultural issues in clinical encounter, and
3. be able to understand the importance of bio-psycho-social approach in patient evaluation.

Areas of interest

Social Factors: age, gender, class

The influence of Social Factors on Health and Illness

Bio-psycho-social model

Stigmatization, medicalization

The Reading list

(New texts will be announced during the course)

Ray M. Fitzpatrick. *Society and Changing Patterns of Disease*. Chapter I in Sociology as Applied to Medicine, edited by Graham Scambler, 1997.

Student Assignments

Assignments will include a minimum of 500-word essays, which will be asked to be written on selected topics given by course tutors. Assignments will be handed back in due time which will be announced by the tutors and preferably will be in word-processor-file format and print-outs.

Course sessions

Course sessions will include didactic lectures, case studies, role plays, personal narratives by the students, and presentation of student assignments.

Course Requirements and Evaluation Method

Full attendance is required, and also your energetic creative participation is the necessary component of our learning environment.

For the evaluation, student assignments will constitute the total score.

*Ethics (Eth)***General Information**

Medical ethics is optimally taught with a mixture of lecture and small group activities. This allows students to acquire the basic core information and to develop the critical analytical and communication skills necessary to successfully identify, analyze and resolve ethical problems faced in clinical practice. The small group activities revolve around the analysis and discussion of the ethical and legal issues in actual clinical cases.

Objectives

At the end of this introductory course, you will be able to

- (1) list and define the major principles and rules of medical ethics,
- (2) demonstrate the awareness about the issues regarding the “beginning of life” and “right to life” issues,
- (3) discuss the central role of “confidentiality” and “informed consent” in clinical practice,
- (4) demonstrate the awareness about the issues regarding the “decisions near the end of life”.

The Reading list

Will be provided.

Student Assignments

Small group assignments will include a minimum of 500-word essays on cases given by course tutor.

Groups (each two-student) will make presentations of their assignments.

Assignments will be handed back at the latest on the last day of the course.

Course sessions

Course sessions will include didactic lectures, presentation of student assignments and discussion.

Course Requirements and Evaluation Method

Full attendance is required.

For the evaluation, student assignments will constitute 50% of the total score; the other 50% will come from the presentation and discussion.

Art and Humanities (AHum)

This course is designed to enrich the medical education experience by exploring the intersection of art, literature, music, philosophy, and history with medicine. Through the lens of these disciplines, students will develop a deeper understanding of the human condition, enhance their critical thinking skills, and cultivate empathy and compassion.

By examining the universal themes of love, loss, joy, and suffering as portrayed in various artistic mediums, students will gain insights into the human experience. Additionally, tracing the evolution of medical practices and their cultural and societal implications will provide a historical context for contemporary healthcare.

Furthermore, this course will delve into the importance of empathy, communication, and cultural sensitivity in the doctor-patient relationship. By discussing ethical dilemmas in healthcare and the role of art and humanities in shaping moral decision-making, students will develop a strong ethical foundation. Finally, the course will explore the therapeutic benefits of art and music therapy, highlighting the impact of art on healing.

By integrating these disciplines into medical education, we aim to foster well-rounded physicians who are not only scientifically competent but also compassionate and culturally aware.

The course plan is as follows.

Committee	Date	Lecture	Duration	Type*	Instructor
Y2C2	WEEK 3	ICS-2 HIM: Social Concepts	4	T	Dr. Sinem Yıldız İnanıcı
	WEEK 6	ICS-2 HIM: Social Concepts	8	T	Dr. Sinem Yıldız İnanıcı
Y2C3	WEEK 2	ICS-2 HIM: Social Concepts	4	T	Dr. Mehmet Akman
	WEEK 3	ICS-2 HIM: HIM - Social Concepts Workshop Exam	2	E	-
	WEEK 4	ICS-2 HIM: Arts and Humanities	8	T	Dr. Mehmet Akman
	WEEK 6	ICS-2 HIM: Arts and Humanities	4	T	Dr. Mehmet Akman
	WEEK 6	ICS-2 HIM: Arts and Humanities	4	T	Dr. Mehmet Akman
Y2C4	WEEK 1	ICS-2 HIM: Ethics	8	T	Dr. Gürkan Sert
	WEEK 2	ICS-2 HIM: Ethics	4	T	Dr. Gürkan Sert
	WEEK 3	ICS-2 HIM: Ethics and Professionalism	2	T	Dr. Ayşe Atasoylu

*T: theoretical lecture, E: exam.

Academic Staff

Dr. Ayşe Atasoylu

Dr. Sinem Yıldız İnanıcı

Dr. Mehmet Akman

Dr. Gürkan Sert

MDN2706 Assessment

- 30% Ethics (assignments)
- 30% HIM & Arts (assignments)
- 40% Social concepts (written) exam

3. Evidence Based Medicine (EBM)

ICS courses, which are an important part of our curriculum, are given in the pre-clinical phase under the names ICS-1, ICS-2 and ICS-3 in grades 1, 2 and 3. The basic contents of these multi-component courses are given in the table below.

ICS-1			ICS-2			ICS-3		
MDN1707 3 credits	MDN1705 3 credits	MDN1706 3 credits	MDN2705 3 credits	MDN2706 3 credits	MDN2707 3 credits	MDN3705 3 credits	MDN3706 3 credits	MDN3707 2 credits
Clinical Skills Laboratory & Introduction to First Aid	Communication Skills & Introduction to Medical Interview	Introduction to Student Research and Computer Skills	Basic Clinical Skills	Human in Medicine	Evidence Based Medicine	Basic Medical Practice	Clinical Skills Laboratory	Student Research Activity
First aid, hand washing, glove wearing, CPR	Effective communication, active listening, group dynamics	Theme: "Explore your universe"	History taking, aspiration, injection, suturing, physical examination	Social concepts, ethics, art and humanities	Theme: "Health and community"	Advanced communication skills, Hospital visit	Physical examination of systems	Theme: "Patients and diseases"

ICS-Research components

Within the scope of the ICS-Research component, students are given courses throughout the academic year and each student carries out a research project in a research group with an advisor throughout the academic year (October-May). The aims of this program are:

- Mastering the steps of scientific research
- Literature review
- Managing group work and working with an advisor
- Being able to create a scientific study methodology
- Being able to prepare a research proposal and apply to the ethics committee
- Being able to collect and analyze data
- Preparing and making presentations
- Being able to review and write articles
- Active participation in national and international congresses

2nd Year projects (ICS-2 Research)

THEME: Health and Community

Within the scope of this theme, studies are mostly conducted on Public Health. There is no restriction on the population. Survey studies that determine or measure Prevalence or Knowledge/Attitudes/Practices are mostly conducted. Retrospective studies can also be planned as long as they fit the theme.

Key learning outcomes of the class:

- In addition to what was learned in the previous year, preparing a research proposal and applying to the ethics committee to obtain study approval.

Some sample titles from previous years:

- Waterpipe Tobacco Smoking: An observational study among university students on Prevalence, Awareness and Contributing Factors in Northern Cyprus
- Acceptance and Knowledge of Parents towards childhood vaccination in Famagusta, TRNC: A cross-sectional study
- A cross-sectional study of Knowledge, Awareness and Behavior towards Breast Cancer among Females living in Famagusta, North Cyprus
- A retrospective study about admissions to the Emergency Department in Famagusta State Hospital

MDN2707 Assessment

30% Reports (Including assignments and End-of-year Report)

20% Presentations (Including Oral and Poster presentations)

30% Personal Evaluation (Including Research Mentor's, Coordinator's, Groupmates' and Self Evaluations)

20% Written Exam

Presentation, Student and Report evaluation forms can be found below.

DOĞU AKDENİZ ÜNİVERSİTESİ - MARMARA ÜNİVERSİTESİ
ULUSLARARASI ORTAK TIP PROGRAMI

KLİNİSYEN BECERİLERİNE GİRİŞ EĞİTİM PROGRAMI

“MDN2707 - Introduction to Student Research and Computer Skills” Dersi

2. Sınıf Öğrenci Araştırmaları Bildiri Sunumu Değerlendirme Rehberi

2023-2024 Akademik Yılı Araştırma Proje Sunumları

DEĞERLENDİRME ÖLÇÜTLERİ	DEĞERLENDİRME ARALIĞI				
ARAŞTIRMA İÇERİĞİ	Çok yetersiz	yetersiz	orta	iyi	Çok iyi
Başlık, grup numarası, danışman ismi ve grup üyeleri isimlerini içeren Giriş Slaytı	1	2	3	4	5
Giriş bölümünde Konu hakkında genel bilgi ve tanımların açıklanması	1	2	3	4	5
Giriş bölümünde konuyla ilgili güncel literatür bilgisi kullanımı, ve benzer çalışmaların gösterilmesi	1	2	3	4	5
Giriş bölümünde araştırma sorusu VEYA temel amacın belirtilmiş olması - Research question(s) VEYA Main aim -> Belirtilmesi zorunludur. - Hypotheses OR Specific objectives -> Var ise belirtilmelidir.	1	2	3	4	5
Yöntem bölümünde araştırma türü, zaman-mekan bilgilerinin belirtilmesi	1	2	3	4	5
Yöntem bölümünde; Çalışma popülasyonu bilgisi VE örneklemin oluşturulma şeklinin açıklanması (study population, sampling method, sample size)	1	2	3	4	5
Yöntem bölümünde; Veri toplama aracının (Anket, vb.) özelliklerinin açıklanması (soru sayısı, kim tarafından hazırlandığı, başka çalışmadan alındıysa referans verilmesi ve izin emailinin gösterilmesi, skrolama, vb)	1	2	3	4	5
Yöntem bölümünde; katılımcılara ne şekilde ulaşıldığının belirtilmesi (veri toplamada kullanılan araçlar; forms, Teams vb)	1	2	3	4	5
Yöntem bölümünde; Veri analizi için kullanılan araçların (SPSS vb) ve analiz metodlarının açık bir şekilde belirtilmiş olması	1	2	3	4	5
Bulguların tablo ve grafiklerle açıklanmış olması, tablo ve grafiklerin değişken tiplerine uygun olması, ha tablosu değil Excel veya uygun bir yazılım ile amaca uygun olarak hazırlanmış olması.	1	2	3	4	5
Bulgular da tanımlayıcı istatistik sonuçlarının verilmesi	1	2	3	4	5
Bulgular da değişkenler arasındaki ilişkilerin istatistik testlerle değerlendirilmiş olması. (Çalışmada hipotez spesifik amaç yok ise şart değildir)	1	2	3	4	5
Tartışma bölümünde bulguların yorumlanması ve/veya benzer araştırmalarla karşılaştırılması	1	2	3	4	5
Tartışma bölümünde, (eğer varsa) limitasyonların belirtilmiş olması	1	2	3	4	5
Sonuçlar bölümünde; amaç kısmında verilmiş olan Araştırma sorusu ve amaç ifadelerinin özet şeklinde yanıtlanması	1	2	3	4	5
Kaynaklar bölümünün (herhangi bir yazım stiline uygun olarak) uygun yazılması, ilgili ve güncel kaynaklar kullanılması, metin içlerinde atf yapılması.	1	2	3	4	5
BİLDİRİ HAZIRLAMA VE SUNMA					
Kullanılan slayt sayısının içeriğin aktarılması için yeterli oluşu	1	2	3	4	5
Slayt sayısının sunum süresi ile uyumluluğu	1	2	3	4	5
Slayt şablonu ve arka plan rengi uygunluğu	1	2	3	4	5
Slaytlardaki harf büyüklüğü, satır sayıları vs. Uygunluğu (max 8-10 satır, 24-30 punto)	1	2	3	4	5

Sunum sonrası sorulardaki başarı durumu ve genel olarak çalışmaya hakim olması	1	2	3	4	5
DEĞERLENDİREN ÖĞRETİM ELEMANI					
TOPLAM PUAN (Toplam puan koordinasyon tarafından hesaplanacaktır.)					

EKLEMEK İSTEDİĞİNİZ YORUMLAR (varsa):

Marmara University - Eastern Mediterranean University International Joint Medical Program
ICS Research course
2023-2024

Form - 2 ARAŞTIRMA SONU ÖĞRENCİ DEĞERLENDİRME FORMU
(DANIŞMAN ÖĞRETİM ÜYESİ TARAFINDAN DOLDURULACAKTIR)

Bu değerlendirme, araştırma etkinliği tamamlandıktan sonra danışman öğretim üyesi tarafından yapılacak ve öğrencinin MEDN163 ders notunu hesaplanmasında kullanılacaktır. Değerlendirmenin aşağıdaki ölçütlere göre, araştırma grubundaki her öğrenci için yapılması gerekmektedir.

Performans Değerlendirme Dereceleri şu şekildedir: 0 = Çok Yetersiz; 1= Yetersiz; 2= Orta; 3= İyi; 4=Çok iyi

Danışman Öğretim üyesinin Adı-Soyadı:

Lütfen, aşağıda listelenmiş olan kriterlere göre danışmanlık yaptığınız grup üyelerinin isimlerini belirterek 0-4 skalasında değerlendiriniz.

	Team member 1	Team member 2	Team member 3	Team member 4	Team member 5
Type names here:					
Attendance to all online and face-to-face meetings					
Contribution to the determination of topic, literature review, and forming study objectives/research questions/hypotheses					
Contribution to preparation of data collection tools and methods					
Contribution to data collection					
Contribution to data entry and statistical analysis					
Contribution to preparations of presentation and poster					
Contribution to preparation of the research report					
Contribution to teamwork and attitude within the team					
General interest to the study, and feeling responsible about the research project					

Marmara University - Eastern Mediterranean University International Medical School Introduction to the Clinical Skills Course Form 1 - ARAŞTIRMA RAPORU DEĞERLENDİRME FORMU		Y2G1
Danışman Öğretim üyesinin Adı-Soyadı:		
DEĞERLENDİRME ÖLÇÜTLERİ	Genel Format Kuralları (15 puan)	0
	Rapor formatına uygun kapak ve içindekiler sayfaları var mı? (5 puan)	
	Font tipi, başlık ve metin font boyutları, satır aralığı, marjin özellikleri doğru mu? Sayfa numaralandırma yapıldı mı? (5 puan)	
	Kısaltmalar ve grafik-tablo açıklamaları (legend) formata uygun mu? (5 puan)	
	Abstract (10 puan)	0
	Çalışmayı temsil ediyor mu? (2 puan)	
	Kısa bir genel bilgiler kısmı, çalışmanın hedefi/amacı açıkça belirtildi mi? (2 puan)	
	Materyal-Metod anlaşılır şekilde özetlendi mi? (2 puan)	
	Araştırma soruları ya da hipotezlere dair bulgular özetlendi mi? (2 puan)	
	Sonuçlar anlaşılır bir şekilde özetlendi mi? (2 puan)	
	Introduction (15 puan)	0
	Literatür bilgisine dayanan, konuya özel güncel bilgileri de içeren ve araştırmanın önemini ortaya koyan bir arka plan bilgisi sunulmuş mu? (5 puan)	
	Araştırmanın amaçları, Araştırma soruları ve/veya hipotezler net olarak belirtilmiş mi? (5 puan)	
	Araştırmanın başlığı yapılmış olan çalışmayla uygun mu? (5 puan)	
	Material and Methods (20 puan)	0
	Araştırmanın tipi (tanımlayıcı, vaka-kontrol, kohort vs) belirtildi mi ve araştırmanın amacına uygun mu? (5 puan)	
	Evren ve örneklem seçimi ayrıntılı bir şekilde açıklanmış mı? (6 puan)	
	Araştırmada hangi araçlarla ve hangi standartlarda ölçüm yapıldığı ayrıntılı bir şekilde açıklanmış mı? (6 puan)	
	Kullanılan istatistiksel yöntemler açıklanmış mı? (3 puan)	

Results (15 puan)	0
Sonuçlar uygun istatistiksel yöntemlerle analiz edilmiş mi? (4 puan)	
Gerekli tanımlayıcı veya karşılaştırma analiz sonuçları doğru ve anlaşılır şekilde aktarıldı mı? (6 puan)	
Tablo ve/veya grafiklerin başlıkları ve düzenlenme biçimleri açıklayıcı ve anlaşılır mı? (3 puan)	
Tablo ve/veya grafiklerden yazı içinde bahsedilerek açıklamaları yazılmış mı? (2 puan)	
Discussion and Conclusion (15 puan)	0
Bulguların kendi içinde tartışıldığı ve/veya başka çalışmalarla karşılaştırıldığı (yani 'tartışma' niteliğine uygun) bir tartışma bölümü var mı? Tartışma literatür bilgisine dayandırılıyor mu? (5 puan)	
Limitasyonlar belirtilmiş mi? (5 puan)	
Sonuçları özetleyen bir conclusion paragrafı verilmiş mi? (5 puan)	
References (7 puan)	0
Metin içinde referanslara atıf yapılmış mı? (3 puan)	
Konuyu dikkate alarak; kaynaklar yeterli ve güncel mi? (2 puan)	
Referanslar yazım kurallarına uygun yazılmış mı? (2 puan)	
Appendices (3 puan)	0
Ölçüm araçlarının tümü (anket ise, onam formu, valide anketler için kullanım izni; anket değil ise veri toplama aracının detayları) Appendix kısmında verilmiş mi? (3 puan)	
TOPLAM (100 Puan)	0

Plan for 2025-2026 MDN2707 Evidence Based Medicine (ICS-2 EBM) course is as it follows.

Committee	Date	Lecture	Lecture hours	Theoretical (T) or Practical (P)	Instructor
Y2C1	WEEK 2	Introduction to 2nd Year Research: Evaluation of ICS-1 Research Projects	1	P	Dr. İlke Akçay
		Introduction to 'MDN2707 Evidence Based Medicine' Course <i>Credit, Assessment, Content and Ethical Approval Process</i>	1	T	Dr. İlke Akçay
	WEEK 2	Evidence based medicine	1	T	Dr. İlke Akçay
		Theme of 2nd year research projects: Health and Community	1	P	Dr. İlke Akçay
	WEEK 3	Research Proposal Workshop (RPW) – Type of Research Studies <i>Descriptive Studies (Case-reports, surveillance, literature reviews)</i>	1	T	Dr. İlke Akçay
		Research Proposal Workshop (RPW) – Type of Research Studies <i>Cross-sectional studies</i>	1	T	Dr. İlke Akçay
		Research Proposal Workshop (RPW) – Type of Research Studies <i>Case-control and Cohort studies</i>	1	T	Dr. İlke Akçay
		Research Proposal Workshop (RPW) – Type of Research Studies <i>Experimental studies, Systematic reviews and Meta-analyses</i>	1	T	Dr. İlke Akçay
	WEEK 4	RPW – Introduction part of a Research Proposal <i>Topic, title, literature review</i>	1	T	Dr. İlke Akçay
		RPW – Introduction part of a Research Proposal How to specify research question(s), objective(s) and hypotheses of a research study?	1	T	Dr. İlke Akçay
	WEEK 4	Group formation and Warm-up activities	1	P	Dr. İlke Akçay
		Practical session: Group study to discuss about candidate topics	1	P	Dr. İlke Akçay
		Practical session: Group study to discuss about candidate topics	1	P	Dr. İlke Akçay
	WEEK 5	RPW – Material and Methods part of a Research Proposal <i>Contents of Material and Methods</i>	1	T	Dr. İlke Akçay
		RPW – Material and Methods part of a Research Proposal <i>Study population, sample and sampling methods</i>	1	T	Dr. İlke Akçay
		RPW – Material and Methods part of a Research Proposal <i>Important points in choosing the appropriate sampling method</i>	1	T	Dr. İlke Akçay
		RPW – Material and Methods part of a Research Proposal <i>Source of data (Data collection tools)</i>	1	T	Dr. İlke Akçay
	WEEK 5	Meeting with mentor	1	P	mentor
	WEEK 6	RPW – Material and Methods part of a Research Proposal <i>Variables</i>	1	T	Dr. İlke Akçay

		RPW – Material and Methods part of a Research Proposal <i>Data analysis methods</i>	1	T	Dr. İlke Akçay
		RPW – Research ethics and Research integrity principles	1	T	Dr. İlke Akçay
		RPW – Research ethics and Research integrity principles	1	T	Dr. İlke Akçay
	WEEK 6	Meeting with mentor	1	P	mentor
Y2C2	WEEK 1	Reviewing RPW & Thinking about limitations of a Research study	1	T	Dr. İlke Akçay
		Article literacy	1	P	Dr. İlke Akçay
		Article literacy	1	P	Dr. İlke Akçay
		Getting ready for Research Proposal Presentations	1	P	Dr. İlke Akçay
	WEEK 1	Meeting with mentor	1	P	mentor
	WEEK 2	Meeting with mentor	1	P	mentor
	WEEK 3	Critics with groups about study proposals (Gr1 & Gr2)	1	P	Dr. İlke Akçay
		Critics with groups about study proposals (Gr3 & Gr4)	1		Dr. İlke Akçay
		Critics with groups about study proposals (Gr5 & Gr6)	1		Dr. İlke Akçay
		Critics with groups about study proposals (Gr7 & Gr8)	1		Dr. İlke Akçay
		Critics with groups about study proposals (Gr9 & Gr10)	1		Dr. İlke Akçay
	WEEK 3	Meeting with mentor	1	P	mentor
	WEEK 6	Research Proposal Presentations (Gr1 & Gr2)	1	P	Seyhan Hidiroglu
		Research Proposal Presentations (Gr3 & Gr4)	1	P	
		Research Proposal Presentations (Gr5 & Gr6)	1	P	
		Research Proposal Presentations (Gr7 & Gr8)	1	P	
		Research Proposal Presentations (Gr9 and Gr10)	1	P	
Y2C3	WEEK 2	Meeting with mentor	1	P	mentor
	WEEK 3	Important points in preparation of an Ethical application file	1	T	Dr. İlke Akçay
		Important points in preparation of an Ethical application file	1	T	Dr. İlke Akçay
	WEEK 4	Critics with groups about study proposal revisions and Ethical Board Applications (Gr1 & Gr2)	1	P	Dr. İlke Akçay
		Critics with groups about study proposal revisions and Ethical Board Applications (Gr3 & Gr4)	1		Dr. İlke Akçay
		Critics with groups about study proposal revisions and Ethical Board Applications (Gr5 & Gr6)	1		Dr. İlke Akçay
		Critics with groups about study proposal revisions and Ethical Board Applications (Gr7 & Gr8)	1		Dr. İlke Akçay

		Critics with groups about study proposal revisions and Ethical Board Applications (Gr9 & Gr10)	1		Dr. İlke Akçay
	WEEK 5	Meeting with mentor	1	P	mentor
Y2C4	WEEK 2	Meeting with mentor	1	P	mentor
	WEEK 4	Determination of appropriate data analysis methods	1	T	Dr. İlke Akçay
		Determination of appropriate data analysis methods	1	T	Dr. İlke Akçay
	WEEK 5	Meeting with mentor	1	P	mentor
	WEEK 7	Important points in Defining variables, entering and cleaning data	1	T	Dr. İlke Akçay
		Important points in Defining variables, entering and cleaning data	1	T	Dr. İlke Akçay
	WEEK 8	Meeting with mentor	1	P	mentor
Y2C5	WEEK 1	Meeting with mentor	1	P	mentor
	WEEK 2	Data analysis (Gr1 & Gr2 & Gr3 & Gr4)	1	T	Dr. İlke Akçay
		Data analysis (Gr1 & Gr2 & Gr3 & Gr4)	1	P	Dr. İlke Akçay
		Data analysis (Gr5 & Gr6 & Gr7)	1		Dr. İlke Akçay
		Data analysis (Gr5 & Gr6 & Gr7)	1		Dr. İlke Akçay
		Data analysis (Gr8 & Gr9 & Gr10)	1		Dr. İlke Akçay
		Data analysis (Gr8 & Gr9 & Gr10)	1		Dr. İlke Akçay
	WEEK 2	Meeting with mentor	1	P	mentor
	WEEK 3	Rules for Oral and Poster Presentations	1	T	Dr. İlke Akçay
		Rules for Oral and Poster Presentations	1	T	Dr. İlke Akçay
	WEEK 4	Meeting with mentor	1	P	mentor
	WEEK 5	Project Presentations	1	P	Seyhan Hidiroglu
		Project Presentations	1	P	
		Project Presentations	1	P	
		Project Presentations	1	P	
		Project Presentations	1	P	
		Project Presentations	1	P	
		Project Presentations	1	P	
	WEEK 6	Meeting with mentor	1	P	mentor
	WEEK 6	Rules for Research Report Writing	1	T	Dr. İlke Akçay
		Rules for Research Report Writing	1	T	Dr. İlke Akçay
	WEEK 7	ICS-2 Research: Feedback session	1	P	Dr. İlke Akçay